

This overview brief will support your use of the evidence-based practice:
Response Interruption/Redirection.

For more information visit: www.afirm.fpg.unc.edu

response interruption/redirection (rir) ---EBP Brief Packet---

Components of the EBP Brief Packet...

This evidence-based practice overview on Response Interruption/Redirection includes the following components:

- 1. **Overview:** A quick summary of salient features of the practice, including what it is, who it can be used with, what skills it has been used with, and settings for instruction.
- 2. **Evidence-base:** The *RIR Evidence-base* details the NPDC criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for this practice.
- 3. **Step-by-Step Guide:** Use the *RIR Step-by-Step Practice Guide* as an outline for how to plan for, use, and monitor RIR. Each step includes a brief description as a helpful reminder while learning the process.
- 4. **Implementation Checklist:** Use the *RIR Implementation Checklist* to determine if the practice is being implemented as intended.
- 5. **Data Collection Sheets:** Use the data collection sheets as a method to collect and analyze data to determine if progress is being made for a learner with ASD.
- 6. **Tip Sheet for Professionals:** Use the *RIR Tip Sheet for Professionals* as a supplemental resource to help provide basic information about the practice to professionals working with the learner with ASD.
- 7. **Parent Guide:** Use the *RIR Parent Guide* to help parents or family members understand basic information about the practice being used with their child.
- 8. Additional Resources: Use the Additional Resources to learn more about the practice.
- 9. **CEC Standards:** A list of *CEC Standards* that apply specifically to RIR.
- 10. **Module References:** A list of numerical *References* utilized for the RIR module.

Suggested citation:

Tomaszewski, B., & AFIRM Team. (2017). Response Interruption/Redirection.

Chapel Hill, NC: National Professional Development Center on Autism

Spectrum Disorders, FPG Child Development Center, University of North

Carolina. Retrieved from http://afirm.fpg.unc.edu/response-interruptionand-redirection



What is RIR?

Response interruption/redirection (RIR) is an evidence-based practice designed to reduce the occurrence of interfering behaviors (e.g., stereotypical, self-injurious). The rationale for RIR is that by introducing a prompt, comment, or other distractor when an interfering behavior is occurring, then interfering behaviors will decrease. RIR is often used after the completion of a <u>Functional Behavior Assessment</u> (FBA). FBA determines the function of an interfering behavior. RIR is often used with other evidence-based practices, including <u>Prompting</u>, <u>Reinforcement</u>, and <u>Differential Reinforcement</u>. RIR is particularly useful as an addition to reinforcement when reinforcement alone is not effective in reducing the behavior.¹

Evidence-base

Response interruption and redirection meets the evidence-based practice criteria set by NPDC with 10 single case design studies. The practice has been effective with learners in preschool (3-5 years) to high school learners (15-22 years). Evidence-based practices (EBP) and studies included in the 2014 EBP report detailed how response interruption and redirection can be used effectively to address: social, communication, behavior, school-readiness, play, and adaptive outcomes.

How Is RIR Being Used?

Response interruption/redirection can be used by a variety of professionals, including teachers, special educators, therapists, and paraprofessionals, in educational and community-based environments. Parents and family members also can use response interruption/redirection in the home.



Autism Focused Intervention Resources & Modules

---Evidence-base for Response Interruption/Redirection---

The National Professional Development Center on ASD has adopted the following criteria to determine if a practice is evidence-based. The EBP Report provides more information about the review process (Wong et al., 2014).

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

- randomized or quasi-experimental design studies (two high quality experimental or quasiexperimental group design studies),
- single-subject design studies (three different investigators or research groups must have conducted five high quality single subject design studies), or
- combination of evidence [one high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups (across the group and single subject design studies)].

--OVERVIEW--

Response interruption and redirection can be used to address a variety of skills and behaviors to eliminate or reduce interfering behaviors. Response interruption/redirection meets the evidence-based practice criteria with 10 single case design studies. The practice has been effective with learners in preschool (3-5 years) to high school learners (15-22 years). Studies included in the 2014 EBP report detailed how response interruption/redirection can be used effectively to address: social, communication, behavior, school readiness, play, and adaptive outcomes.

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

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High (15-22)
No studies	Social	Social		
	Communication	Communication		
	Behavior	Behavior	Behavior	Behavior
	School Readiness	School Readiness		
	Play	Play		
	Adaptive	Adaptive		



Early intervention (0-2 years)

No studies

Preschool (3-5 years)

- *Ahearn, W. H., Clark, K. M., MacDonald, R. P., & Chung, B. I. (2007). Assessing and treating vocal stereotypy in children with autism. *Journal of Applied Behavior Analysis, 40*(2), 263-275. doi: 10.1901/jaba.2007.30-06
- *Ahrens, E. N., Lerman, D. C., Kodak, T., Worsdell, A. S., & Keegan, C. (2011). Further evaluation of response interruption and redirection as treatment for stereotypy. *Journal of Applied Behavior Analysis, 44*(1), 95-108. doi: 10.1901/jaba.2011.44-95
- *Cassella, M. D., Sidener, T. M., Sidener, D. W., & Progar, P. R. (2011). Response interruption and redirection for vocal stereotypy in children with autism: A systematic replication. *Journal of Applied Behavior Analysis, 44*(1), 169-173. doi: 10.1901/jaba.2011.44-169
- *Lang, R., O'Reilly, M., Sigafoos, J., Machalicek, W., Rispoli, M., Lancioni, G. E., ... & Fragale, C. (2010). The effects of an abolishing operation intervention component on play skills, challenging behavior, and stereotypy. *Behavior Modification*, *34*(4), 267-289. doi: 10.1177/0145445510370713
- Miguel, C. F., Clark, K., Tereshko, L., & Ahearn, W. H. (2009). The effects of response interruption and redirection and sertraline on vocal stereotypy. *Journal of Applied Behavior Analysis*, 42(4), 883. doi: 10.1901/jaba.2009.42-883

Elementary (6-11 years)

- *Ahearn, W. H., Clark, K. M., MacDonald, R. P., & Chung, B. I. (2007). Assessing and treating vocal stereotypy in children with autism. *Journal of Applied Behavior Analysis*, 40(2), 263-275. doi: 10.1901/jaba.2007.30-06
- *Ahrens, E. N., Lerman, D. C., Kodak, T., Worsdell, A. S., & Keegan, C. (2011). Further evaluation of response interruption and redirection as treatment for stereotypy. *Journal of Applied Behavior Analysis, 44*(1), 95-108. doi: 10.1901/jaba.2011.44-95
- *Cassella, M. D., Sidener, T. M., Sidener, D. W., & Progar, P. R. (2011). Response interruption and redirection for vocal stereotypy in children with autism: A systematic replication. *Journal of Applied Behavior Analysis, 44*(1), 169-173. doi: 10.1901/jaba.2011.44-169
- *Duker, P. C. & Schappveld, M. (1996). Increasing on-task behaviour through interruption-prompting. *Journal of Intellectual Disability Research*, 40, 291-297.
- Lang, R., O'Reilly, M., Sigafoos, J., Lancioni, G. E., Machalicek, W., Rispoli, M., & White, P. (2009). Enhancing the effectiveness of a play intervention by abolishing the reinforcing value of stereotypy: A pilot study. Journal of *Applied Behavior Analysis*, *42*(4), 889. doi: 10.1901/jaba.2009.42-889

Response Interruption / Redirection (RIR)

Elementary (6-11 years continued)

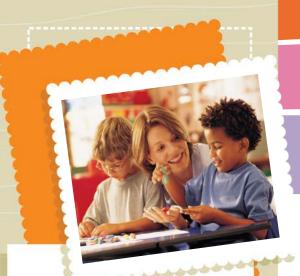
- *Lang, R., O'Reilly, M., Sigafoos, J., Machalicek, W., Rispoli, M., Lancioni, G. E., ... & Fragale, C. (2010). The effects of an abolishing operation intervention component on play skills, challenging behavior, and stereotypy. Behavior Modification, 34(4), 267-289. doi: 10.1177/0145445510370713
- Liu Gitz, L., & Banda, D. R. (2010). A replication of the RIRD strategy to decrease vocal stereotypy in a student with autism. Behavioral Interventions, 25(1), 77-87.
- Magnusson, A. F., & Gould, D. D. (2007). Reduction of automatically maintained self injury using contingent equipment removal. Behavioral Interventions, 22(1), 57-68. doi: 10.1002/bin.231
- *Kern, L., Marder, T. J., Boyajian, A. E., Elliot, C. M., & McElhattan, D. (1997). Augmenting the independence of self-management procedures by teaching self-initiation across settings and activities. *School Psychology Quarterly*, 12(1), 23-32. doi: 10.1037/h0088944
- *Koegel, R. L., & Koegel, L. K. (1990). Extended reductions in stereotypic behavior of students with autism through a self management treatment package. *Journal of Applied Behavior Analysis, 23*(1), 119-127. doi: 10.1901/jaba.1990.23-119

Middle (12-14 years continued)

- *Duker, P. C. & Schappveld, M. (1996). Increasing on-task behaviour through interruption-prompting. *Journal of Intellectual Disability Research*, 40, 291-297.
- Rapp, J. T., Vollmer, T. R., & Hovanetz, A. N. (2006). Evaluation and treatment of swimming pool avoidance exhibited by an adolescent girl with autism. *Behavior Therapy*, *36*(1), 101-105. doi: 10.1016/S0005-7894(05)80058-9

High (15-22 years)

- *Duker, P. C. & Schappveld, M. (1996). Increasing on-task behaviour through interruption-prompting. *Journal of Intellectual Disability Research*, 40, 291-297.
- * Research which included participants in multiple age ranges.



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Autism Focused Intervention Resources & Modules

Response Interruption/Redirection (RIR)
---Step-by-Step Guide---

BEFORE YOU START...

Each of the following points is important to address so that you can be sure the selected EBP is likely to address the learning needs of your student.

Have you found out more information about. . .?

- ☐ Established a goal or outcome that clearly states when the behavior will occur, what the target skill is, and how the team will know when the skill is mastered...
- □ Identifying evidence-based practices...

If the answer to any of these is "no," review the process of how to select an EBP.

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This practice guide outlines how to plan for, use, and monitor the practice of Response Interruption/ Redirection.

Keep in mind that RIR can be used to decrease inappropriate behaviors and increase appropriate behaviors.



Now you are ready to start...

Step 1: Planning

The planning step explains initials steps and considerations involved when using RIR as an intervention for a learner.

1.1 Conduct a Functional Behavior Assessment

To identify the interfering behavior to address using RIR, complete a functional behavior assessment (FBA). Identifying the function of the behavior will help select appropriate response interruption/redirection procedures.

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.

Use the FBA Hypothesis Statement Sheet to develop a hypothesis statement.

1.2 Identify response interruption and redirection procedures

Identify the appropriate response interruption and redirection procedures to address the interfering behavior. RIR is best used when the function of the behaviors are not maintained by attention or escape. Remember that multiple options may be appropriate to try with the learner.

Use the RIR Behavior Considerations Sheet to identify possible RIR procedures.

1.3 Select appropriate alternative behaviors

An alternative behavior must be selected to take the place of the interfering behavior.

1.4 Identify reinforcers

To increase the likelihood that the learner will engage in the alternative behavior again in the future, select reinforcers that are appropriate for the individual learner and the target skills. Reinforcers should be selected based on the learner's interests and motivations.

Note: Check out the R+ module for more information about Reinforcement.

Use the RIR Reinforcer Checklist to help you identify reinforcers.

1.5 Train staff members

To ensure consistent implementation of RIR across settings, it is helpful that the entire team be trained. If only one team member is using RIR, effectiveness may be limited, as this one person may not always be the person working directly with the learner when they engage in the interfering behavior. To increase appropriate behaviors and decrease interfering behaviors, it will be important that RIR be conducted consistently across settings.

Use the RIR Planning Worksheet to train team members and ensure fidelity.

Step 2: Using

This section describes the process of implementing RIR.

2.1 Praise learner's independent use of appropriate behaviors

When using RIR, it is important to provide the learner with verbal praise each time the learner is using appropriate behaviors independently. This will help the learner to associate the appropriate behaviors with verbal praise.

2.2 Use identified RIR procedure

Different procedures are needed for each interfering behavior when using RIR.

- a. Motor stereotypy
 - Verbal blocking: State learner's name in a neutral tone of voice and prompt learner to give a
 verbal response, such as asking a question or prompting vocal imitation, or a physical
 response, such as engaging in a physical task or prompting motor imitation.
 - Physical blocking: For a physical object, physically stop object from moving (e.g., a toy from spinning) and prompt learner to give a verbal response, such as asking a question or prompting vocal imitation, or a physical response such as engaging in a physical task or prompting motor imitation. For a body part, physically touch the body part (e.g., hands if a learner is hand flapping) and prompt learner to give a verbal response, such as asking a question or prompting vocal imitation, or a physical response such as engaging in a physical task or prompting motor imitation.

b. Vocal stereotypy

• <u>Verbal blocking</u>: State learner's name in a neutral tone of voice and prompt learner to give a verbal response, such as asking a question or prompting vocal imitation, or a physical response, such as engaging in a physical task or prompting motor imitation.

c. Self-injury

- <u>Verbal blocking</u>: Tell learner to stop and prompt learner to engage in a physical task or provide learner with preferred object.
- <u>Physical blocking</u>: Physically touch the body part (e.g., leg if the learner is kicking) and prompt learner to engage in a physical task or provide learner with preferred object.

d. Challenging behavior

- <u>Verbal blocking</u>: Tell learner to stop and prompt learner to engage in a physical task or provide learner with preferred object.
- <u>Physical blocking</u>: Physically touch the body part (e.g., leg if the learner is kicking) and prompt learner to engage in a physical task or provide learner with preferred object.

Step 2: Using (continued)

2.3 Prompt use of alternative behavior

Team members will need to use prompting procedures in conjunction with response interruption/redirection to teach learners with ASD alternative behaviors in order for learners to perform the alternative behavior correctly. The assistance can be provided by a prompt used after the instruction is given to help the learner perform the correct response. Prompts may be gestural, verbal, visual, model, or physical.

Remember, team members should always select the least restrictive prompt needed by the learner to use the alternative behavior successfully.

Note: Check out the PP module for more information about Prompting.

2.4 Reinforce learner's use of alternative behavior

When first beginning to use response interruption/redirection, it is important to use continuous reinforcement by providing the learner with ASD the identified reinforcer(s) each time the learner uses the alternative behavior. Continuous reinforcement will help the learner association the alternative behavior with the selected reinforcer(s). The reinforcer should be delivered immediately and consistently (e.g., within 3 seconds each time the learner uses the alternative behavior).

When delivering the reinforcer, be sure to describe the alternative behavior after the learner has used it correctly.

Once the learner is successful, move to an intermittent schedule where the reinforcer is delivered following use of alternative behaviors some of the time, but not every instance. Refer to the reinforcement module for more information about reinforcers.

Note: Check out the R+ module for more information about Reinforcement.

Step 3: Monitoring

The following process describes how RIR can be monitored and how this data can be used to guide further support the learner.

3.1 Review collected data

Collecting data with team members will help determine if a learner is making progress in reducing interfering behaviors or increasing use of appropriate behaviors. Three common forms of data collection commonly used with RIR are frequency, interval, or duration data.

Use the RIR Event Sampling Form to monitor the frequency behaviors.

Use the RIR Interval Data Form to monitor the frequency of behaviors.

 $\stackrel{ ext{l}}{ ext{l}}$ Use the RIR Duration Data Form to monitor the length of behaviors.

3.2 Determine next steps

Decide with the parent when a learner has mastered a skill or behavior and what the next steps should be. You might move on to another EBP or use the same EBP with a different target or goal.

If the learner with ASD is not showing progress with response interruption/redirection, ask yourself the following questions:

- Is the behavior well defined?
- Is the behavior measurable and observable?
- Did a functional behavior assessment (FBA) indicate the function of the behavior?
- Was response interruption/redirection used with fidelity? (Use the Implementation Checklist to determine fidelity.)
- Does the prompt ensure the learner uses the alternative behavior?
- Are reinforcers used that are motivating to the learner?
- Are all team members using response interruption and redirection consistently?

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

---Implementation Checklist---

Before you start:

Have you...

- Identified the behavior?
- Collected baseline data through direct observation?
- □ Established a goal or outcome that clearly states when the behavior will occur, what the target skill is, and how the team will know when the skill is mastered.

If the answer to any of these is "no", refer to the "Selecting EBPs" section on the website.

Observation	1	2	3	4
Date				
Observer's Initials				
Step 1: Planning				
1.1 Conduct a functional behavior assessment				
1.2 Identify RIR procedures				
1.3 Select an appropriate alternative behavior				
1.4 Identify reinforcers				
1.5 Train team members				
Step 2: Using				
2.1 Praise learner's independent use of appropriate behaviors				
2.2 Use identified procedure				
2.3 Prompt for the alternative behavior				
2.4 Reinforce use of the alternative behavior				
Step 3: Monitoring				
3.1 Collect and analyze data on interfering behavior				
3.2 Determine next steps based on learner progress				







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---RIR Behavior Considerations---

The functions of these behaviors often are not maintained by attention or escape. Instead, they are more likely maintained by sensory reinforcement. Multiple options may be appropriate to try with the learner.

Interfering Behaviors	Description	Function of Behavior	Response interruption	Redirection
Motor stereotypy	Movement of body parts that have no apparent function and/or movement that is not directed toward another individual (e.g., hand flapping, hand mouthing, putting fingers in ears, fanning/spreading fingers, spinning toy).	Sensory stimulation	-Physically block (e.g., stopping toy from moving) -Verbally block (e.g., state learner's name in a neutral tone of voice)	-Prompt learner for a motor response (e.g., "Hold hands in lap.") - Ask learner a social question or give prompt that requires a verbal response (e.g., "Where do you live?")
Vocal stereotypy	Vocalizations that have no apparent function and are not directed toward another individual (e.g., echolalia, non-contextual laughing/giggling, non-contextual words/phrases, non-recognizable words).	Sensory stimulation	-Verbally block (e.g., state learner's name in a neutral voice)	-Prompt learner for a motor response (e.g., "Clap your hands") -Ask learner a social question or give prompt that requires a verbal response (e.g., "Say Mom")
Self-injury	Any aggressive behavior that is directed towards oneself (e.g., hitting, scratching, biting).	Sensory stimulation	-Physically block (e.g., touch body part that is involved in self- injurious behavior) -Verbally block (e.g., say "Stop")	-Providing preferred toys and/or objects - Prompt learner to engage in physical and verbal task (e.g., "Fold your hands and count aloud to 10")
Challenging behavior	Any behavior that is disruptive (e.g., screaming, aggression towards others, eloping, falling to the ground).	Sensory stimulation	-Physically block (e.g., touch body part that is involved in challenging behavior) -Verbally block (e.g., say "Stop")	-Providing preferred toys and/or objects -Prompt learner to engage in physical task (e.g., sit in a chair, stand up, fold arms)



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Functional Be	havior <i>i</i>	Assessm	ent
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Learner's Name:	Date/Time:
Observer(s):	
Interfering Behavior:	
•	

A-B-C Data Chart:

In the table below, record your observations

	Setting	Antecedent	Behavior	Consequence
Date:				
Time:				
Date:				
Time:				
Date:				
Time:				
Date:				
Time:				
Date:				
Time:				
Date:				
Time:				
Date:				
Time:				
Date:				
Time:				
Date:				
Time:				
Date:				
Time:				



---FBA Hypothesis Statement---Date/Time:

ehavior invo	on to answavior been	er the follonterfering	owing que	estions: earner's de	velopment	t and learning
ehavior invo	avior been	nterfering sion or dar	with the le	earner's de		
ehavior invo	olve aggres	sion or dar				
			mage to pi	roperty? _		
			mage to pi	roperty? _		
ne behavior	occurring?					
ties is the le	earner parti	cipating in	when the	behavior o	occurs?	
proximity (of others (e	g. teacher	r, peer, pra	ctitioner) v	when the b	ehavior occu
	thers (teach	thers (teacher, peer, pr	thers (teacher, peer, practitioner)	thers (teacher, peer, practitioner) doing who	thers (teacher, peer, practitioner) doing when the beh	ties is the learner participating in when the behavior occurs? thers (teacher, peer, practitioner) doing when the behavior occur proximity of others (e.g. teacher, peer, practitioner) when the behavior occur

Learner's Name: _

W	hat is the noise level in the environment when the behavior occurs?
Но	ow many peers and adults are present when the behavior occurs?
W	hat other environmental conditions (e.g. lighting) are present when the behavior occu
	pes the behavior occur because the learner is being asked to demonstrate a skill that e/she cannot perform (e.g. talking with peer, completing a difficult math assignment)?
	pes the learner exhibit other behaviors immediately before the behavior occurs ntecedents)?
W	hat happens immediately after the interfering behavior occurs (consequences)?

Continue \rightarrow

Determine the function of the behavior:

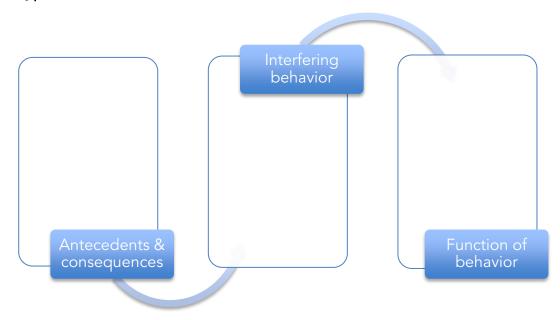
10	get	or	obtain:	

- □ Attention
- ☐ Food
- ☐ Toys
- ☐ Hugs
- ☐ Sensory Stimulation

To escape or avoid:

- □ Attention
- ☐ Difficult task/activity
- ☐ Undesirable activity
- ☐ Sensory stimulation
- ☐ Social stimulation

Develop a hypothesis statement:



Hypothesis statement:

Date/Time:



---RIR Reinforcer Checklist---

AFIRIVI	Learner's Name:	Date/Time:
	Observer(s):	
	Use the reinforcer checklist to h	nelp identify appropriate reinforcers. This list
Autism Focused Intervention Resources & Modules	includes some generic items/fo	ods/interests, but keep in mind that a
Resources a Modules	reinforcer may be anything that	is interesting and motivating to the learner.
Foods for Snacks/Mealtime	Routines	
☐ Goldfish	☐ French Fries	☐ Ice Cream
□ Pizza	□ Pretzels	
☐ Chicken Nuggets	☐ Chips	
☐ Fruit	□ Cheese	
Games for Play/Recess Rou	ıtines:	
☐ Peek-a-boo	□ Pat-a-Cake	П
☐ Chase	☐ Tickle games	
☐ Burrito games with	_	
blanket	<u> </u>	
Toys for Play/Recess Routin	nes:	
☐ Trains and Cars	□ Computer	☐ Books
☐ Legos	□ Puzzles	
☐ Remote controls	□ Noisy toys	_
☐ Phones	□ Doll house	
		_
Special Interests for Activit		
☐ Movie:	☐ TV Show:	☐ Real-Life Person:
☐ Movie Character:	☐ TV Show Character:	∵ □ Video Game:
	П С Т' Т	□ Ma.'s
☐ Letters	☐ Cars, Trains, Trucks	
□ Numbers	☐ Dinosaurs	☐ Computers/Technology
	For more	
	information, visit:	
	www.afirm.fpg.unc.edu	



---RIR Planning Worksheet---

Autism Foc Resources	& Modules		Learner's Name: Teacher(s): Use this form to train to procedure consistently	eam members to ir	Date/Time: Setting: nplement the selected RIR
Interfering Behavior					
Selected RI Procedures					
Replaceme Behavior	ent				
Reinforcer					
Anecdotal	Notes:				
Date	Observ Initials	er Comme	nts or Plans for Next	Steps	
		·	For mo	ore	

information, visit: www.afirm.fpg.unc.edu



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Event Sampling	Data C	Collection
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Learner's Name:	Date/Time:
Observer(s):	
Interfering Behavior:	
-	

Event Sampling:

Use event recording to collect the frequency data at every instance the behavior occurs.

Date	Behavior	Total	Time Point

Anecdotal Notes:

Date	Observer Initials	Comments and Plans for Next Steps



Autism Focused Intervention Resources & Modules

---Interval Data Collection---

Learner's Name:	Date/Time:	
Observer(s):		
Interfering Behavior:		
<u> </u>		

Interval Data:

Record when the interfering behavior (IB) occurs during an interval.

Total	Observ	ation T	ime:					Len	gth of	Each In	terval:			
Date				l (+=IB	occurs	, 0=IB c	oes no	t occur)						
Date	1	2	3	4	5	6	7	8	9	10	70	(c	ircle one)	
												Before	During	After
												Before	During	After
												Before	During	After
												Before	During	After
												Before	During	After
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												Before	During	After
												Before	During	After
												Before	During	After
												Before	During	After



Autism Focused Intervention Resources & Modules

--- Duration Data Collection---

Learner's Name:	Date/Time:	
Observer(s):		
Interfering Behavior:		
· ·		

Duration Data:

Use duration data to collect the length of the behavior.

Date	Start Time	End Time	Total	Time Point

Anecdotal Notes:

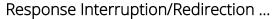
Date	Observer Initials	Comments and Plans for Next Steps

Autism Focused Intervention Resources & Modules

AFIRM

Response Interruption/Redirection (RIR)

---Professional's Guide---



- is an evidence-based practice for children and youth with autism spectrum disorder (ASD) from 3 to 22 years old.
- is a practice used to decrease behaviors that interfere with learning and daily functioning.

Why Use?

- Response interruption/redirection is used to address significant interfering behaviors that are often difficult to address.
- Response interruption/redirection redirects learners to increase their use of more appropriate behaviors

Outcomes

• The evidence – base for response interruption/redirection supports the use of this practice to address the outcomes below:

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High (15-22)
No studies	Social	Social		
	Communication	Communication		
	Behavior	Behavior	Behavior	Behavior
	School- Readiness	School- Readiness		
	Play	Play		
	Adaptive	Adaptive		

RESPONSE INTERRUPTION / REDIRECTION



TIPS:

- Use the RIR
 Behavior
 Considerations
 Sheet to identify
 possible RIR
 procedures.
- Select an alternative behavior that takes the place of the interfering behavior.
- Identify reinforcers that are appropriate for the individual learner and the target skills.



Response Interruption/ Redirection (RIR)
---Professional's Guide---

STEPS FOR IMPLEMENTING

RESPONSE INTERRUPTION

/ REDIRECTION

This tip sheet was designed as a supplemental resource to help provide basic information about the practice.

For more information, visit: www.afirm.fpg.unc.edu



1. Plan

- Conduct a Functional Behavior Assessment
- Identify RIR procedures
- Select an appropriate alternative behavior
- Identify reinforcers
- Train team members

2. Use

- Praise learner's use of appropriate behaviors
- Use identified procedure for vocal stereotypy, motor stereotypy, self-injury, and challenging behavior
- Prompt for the alternative behavior
- Reinforce use of the alternative behavior

3. Monitor

- Collect data on target behaviors
- Determine next steps based on learner progress



This parent introduction to Response Interruption/Redirection was designed as a supplemental resource to help answer basic questions about this practice.

To find out more about how Response Interruption/
Redirection is used with your child, speak with:

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For more information visit: www.afirm.fpg.unc.edu

AFIRM

Autism Focused Intervention Resources & Modules

Response Interruption/Redirection (RIR) ---Parent's Guide---

This introduction provides basic information about RIR.

What is RIR?

- Response interruption and redirection is an evidencebased practice for children and youth with autism spectrum disorder (ASD) from 3 to 22 years old.
- Response interruption and redirection is a practice used to decrease behaviors that interfere with learning and daily functioning.

Why use RIR with my child?

- Response interruption and redirection can be used reduce interfering behaviors and increase on-task activities
- Research studies have shown that response interruption and redirection has been used effectively with learners in preschool, elementary school, middle school, and high school to address social, communication, behavior, school readiness, play, and adaptive outcomes.

What activities can I do at home?

- Praise or reinforce appropriate behaviors(such as following directions, completing chores, saying good morning)
- Notice when your child has an interfering behavior.
 Think about what happened before and after the behavior. Share your notes and observations with your IEP team to develop possible reasons for the purpose of the behavior.
- If the same behavior is happening at home and school, use the same response interruption and redirection strategy in both settings



Check out these resources to support your use of Response Interruption/ Redirection.

For more information visit: www.afirm.fpg.unc.edu

Response Interruption/ Redirection

---Additional Resources---

Articles:

- Colón, C. L., Ahearn, W. H., Clark, K. M., & Masalsky, J. (2012). The effects of verbal operant training and response interruption and redirection on appropriate and inappropriate vocalizations. *Journal of Applied Behavior Analysis, 45*(1), 107-120. doi:10.1901/jaba.20l2.45-107
- Dickman, S. E., Bright, C. N., Montgomery, D. H., & Miguel, C. F. (2012). The effects of response interruption and redirection (RIRD) and differential reinforcement on vocal stereotypy and appropriate vocalizations. *Behavioral Interventions*, *27*(4), 185-192. doi:10.1002/bin.1348
- Giles, A. F., St. Peter, C. C., Pence, S. T., & Gibson, A. B. (2012). Preference for blocking or response redirection during stereotypy treatment. *Research in Developmental Disabilities*, *33*(6), 1691-1700. doi:10.1016/j.ridd.2012.05.008
- Love, J. J., Miguel, C. F., Fernand, J. K., & LaBrie, J. K. (2012). The effects of matched stimulation and response interruption and redirection on vocal stereotypy. *Journal of Applied Behavior Analysis*, 45(3), 549-564. doi:10.1901/jaba.2012.45-549
- Lydon, S., Healy, O., O'Reilly, M., & McCoy, A. (2013). A systematic review and evaluation of response redirection as a treatment for challenging behavior in individuals with developmental disabilities. *Research in Developmental Disabilities, 34*(10), 3148-3158. doi:10.1016/j.ridd.2013.06.010
- Martinez, C. K., & Betz, A. M. (2013). Response interruption and redirection: Current research trends and clinical application. *Journal of Applied Behavior Analysis, 46*(2), 549-554. doi:10.1002/jaba.38
- Martinez, C. K., Betz, A. M., Liddon, C. J., & Werle, R. L. (2016). A progression to transfer RIRD to the natural environment. *Behavioral Interventions*, *31*(2), 144-162. doi:10.1002/bin.1444
- Pastrana, S. J., Rapp, J. T., & Frewing, T. M. (2013). Immediate and subsequent effects of response interruption and redirection on targeted and untargeted forms of stereotypy. *Behavior Modification*, *37*(4), 591-610. doi:10.1177/0145445513485751
- Saini, V., Gregory, M. K., Uran, K. J., & Fantetti, M. A. (2015). Parametric analysis of response interruption and redirection as treatment for stereotypy. *Journal of Applied Behavior Analysis*, 48(1), 96-106. doi:10.1002/jaba.186
- Shawler, L. A., & Miguel, C. F. (2015). The effects of motor and vocal response interruption and redirection on vocal stereotypy and appropriate vocalizations. *Behavioral Interventions*, *30*(2), 112-134. doi:10.1002/bin.1407
- Wunderlich, K. L., & Vollmer, T. R. (2015). Data analysis of response interruption and redirection as a treatment for vocal stereotypy. *Journal of Applied Behavior Analysis,* 48(4), 749-764. doi:10.1002/jaba.227

Website:

Autism Hub and Reading Centre. (2017). Response interruption/redirection. *The State of Queensland (Department of Education and Training)*. Retrieved December 18, 2017, from https://ahrc.eq.edu.au/services/fba-tool/help/response-interruption-redirection.





Autism Focused Intervention Resources & Modules

Response Interruption/Redirection CEC Standards

The CEC Standards that apply to all 27 evidence-based practices can be found on our website at: http://afirm.fpg.unc.edu/learn-afirm

Below are CEC Standards that apply specifically to Response Interruption/Redirection (RIR) module.

Standard	Description		
Initial Prepara	tion Standard 4: Assessment		
DDA4 S2	Develop strategies for monitoring and analyzing challenging behavior and its communicative intent		
DDA4 S3	Conduct functional behavior assessments that lead to development of behavior support plans		
Initial Prepara	tion Standard 5: Instructional Planning & Strategies		
DDA5 S5	Consistent use of proactive strategies and positive behavioral supports		
Initial Prepara	tion Standard 7: Collaboration		
ISCI 7 S9	Model techniques and coach others in the use of instructional methods and accommodations		

Standard	Description
Advanced Prep	paration Standard 1: Assessment
SEDAS1.S7	Conduct functional behavioral assessments (FBA) to determine what initiates and maintains a challenging/interfering behavior
Advanced Prep	paration Standard 3: Programs, Services, and Outcomes
SEDAS3.S5	Implement instructional strategies that promote the generalization of skills across domains and settings

---Module References---

- 1. Ahrens, E. N., Lerman, D. C., Kodak, T., Worsdell, A. S., & Keegan, C. (2011). Further evaluation of response interruption and redirection as treatment for stereotypy. *Journal of Applied Behavior Analysis, 44*(1), 95-108. doi: 10.1901/jaba.2011.44-95
- 2. Ahearn, W. H., Clark, K. M., MacDonald, R. P., & Chung, B. I. (2007). Assessing and treating vocal stereotypy in children with autism. *Journal of Applied Behavior Analysis*, 40(2), 263-275. doi: 10.1901/jaba.2007.30-06
- 3. Cassella, M. D., Sidener, T. M., Sidener, D. W., & Progar, P. R. (2011). Response interruption and redirection for vocal stereotypy in children with autism: A systematic replication. *Journal of Applied Behavior Analysis, 44*(1), 169-173. doi: 10.1901/jaba.2011.44-169
- 4. Duker, P. C. & Schappveld, M. (1996). Increasing on-task behaviour through interruption-prompting. *Journal of Intellectual Disability Research*, 40, 291-297.
- 5. Lang, R., O'Reilly, M., Sigafoos, J., Lancioni, G. E., Machalicek, W., Rispoli, M., & White, P. (2009). Enhancing the effectiveness of a play intervention by abolishing the reinforcing value of stereotypy: A pilot study. Journal of *Applied Behavior Analysis*, 42(4), 889. doi: 10.1901/jaba.2009.42-889
- 6. Lang, R., O'Reilly, M., Sigafoos, J., Machalicek, W., Rispoli, M., Lancioni, G. E., ... & Fragale, C. (2010). The effects of an abolishing operation intervention component on play skills, challenging behavior, and stereotypy. *Behavior Modification*, *34*(4), 267-289. doi: 10.1177/0145445510370713
- 7. Liu-Gitz, L., & Banda, D. R. (2010). A replication of the RIRD strategy to decrease vocal stereotypy in a student with autism. *Behavioral Interventions*, *25*(1), 77-87.
- 8. Miguel, C. F., Clark, K., Tereshko, L., & Ahearn, W. H. (2009). The effects of response interruption and redirection and sertraline on vocal stereotypy. *Journal of Applied Behavior Analysis, 42*(4), 883. doi: 10.1901/jaba.2009.42-883
- 9. Magnusson, A. F., & Gould, D. D. (2007). Reduction of automatically-maintained self-injury using contingent equipment removal. *Behavioral Interventions*, *22*(1), 57-68. doi: 10.1002/bin.231
- 10. Rapp, J. T., Vollmer, T. R., & Hovanetz, A. N. (2006). Evaluation and treatment of swimming pool avoidance exhibited by an adolescent girl with autism. *Behavior Therapy, 36*(1), 101-105. doi: 10.1016/S0005-7894(05)80058-9
- 11. Wong, C., Odom, S. L., Hume, K. Cox, A. W., Fettig, A., Kucharczyk, S., Schultz, T. R. (2014). Evidence-based practices for children, youth, and young adults with autism spectrum disorder. Chapel Hill: The University of North Carolina, Frank Porter Graham Child Development Institute, Autism Evidence-Based Practice Review Group. http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/imce/documents/2014-EBP-Report.pdf
- 12. Alberto, P. A., & Troutman, A. C. (2008). *Applied behavior analysis for teachers* (8th ed). Upper Saddle River, NJ: Prentice-Hall.

---Module References---

- 13. Godby, S., Gast, D. L., & Wolery, M. (1987). A comparison of time delay and system of least prompting in teaching object identification. *Research in Developmental Disabilities, 8*, 283-306. doi:10.1016/0891-4222(87)90009-6
- 14. West, E. A., & Billingsley, F. (2005). Improving the system of least prompts: A comparison of procedural variations. *Education and Training in Developmental Disabilities, 40*(2), 131-144.