



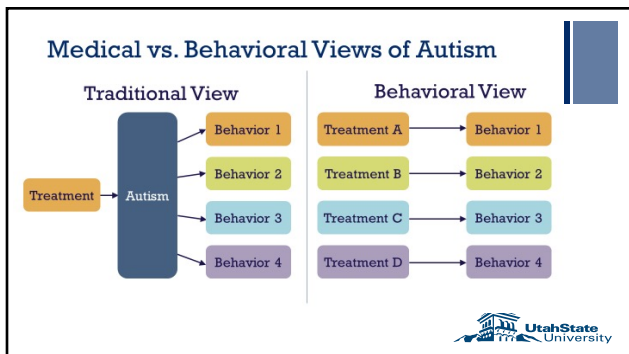
1

Introduction

- According to the diagnostic criteria for autism spectrum disorders individuals must have a persistent deficit in social communication and interaction
 - Deficits in social-emotional reciprocity
 - Deficits in nonverbal communicative behaviors
 - Deficits in developing, maintaining and understanding relationships

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2



3

Communication

- Deficits in social-emotional reciprocity
- Types of Communication
 - Requesting
 - Conversations (Initiations and Responding)
 - Commenting
- Communication can be...
 - Spontaneous
 - Independent
 - Prompted

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4

Social Scripts

- Scripts function as cues to emit specifically trained words or phrases
- Interventionists use physical prompting, graduated guidance, and vocal prompting of the scripted statement to train individuals to use the script
- After the individual reliably follows the scripts, they are systematically faded
- After scripts are introduced and faded, individuals often continue to use the learned scripts even when they are no longer present
- Scripts have been identified as a effective intervention to teach communication for individuals between 3 and 19 years of age

Akers et al., 2016; McClannahan & Krantz, 2005; Topuz & Ulke-Kurkcuoglu, 2021

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5

Script Formats

- Textual Script
 - Paper
 - Apple iTouch
 - Smartphone
- Audio Recorder (most commonly used in research)
 - Audio buttons
 - Mobile phones
 - Palm pilots
 - Apple iTouch

Topuz & Ulke-Kurkcuoglu, 2021

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6

Textual Scripts

- Written script that an individual reads and repeats



Brodhead et al., 2016; Sellers et al., 2016

7

Textual Scripts

- Written script that an individual reads and repeats



Brodhead et al., 2016; Sellers et al., 2016

8

Textual Scripts

- Written script that an individual reads and repeats



Brodhead et al., 2016; Sellers et al., 2016

9

Textual Scripts

- Written script that an individual reads and repeats



Brodhead et al., 2016; Sellers et al., 2016

10

Textual Scripts - Advantages

- After the individual learns the script, they can largely manage it independently, which reduces the need for continuous prompting from another individual in the environment
- Easy to manage, transport, and fade



11

Textual Scripts – Prerequisite Skills

- Ability to read basic words
 - If the individual is not reading then the scripts can be pre-taught prior to the training
 - Or can be learned during the teaching process
- Ability to respond to physical prompts and imitate a vocal model



12

Auditory Scripts

- The script is recorded on a recording device that the individual listens to and repeats



Akers et al., 2018; Betz et al., 2011; Howlett et al., 2011

13

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14

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15

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Akers et al., 2018; Betz et al., 2011; Howlett et al., 2011

16

Auditory - Advantages

- After the individual learns the script, they can largely manage it independently, which reduces the need for continuous prompting from another individual in the environment
- Easy to manage, transport, and fade
- Great for individuals who do not have well-developed reading repertoires



17

Auditory Scripts- Prerequisite Skills

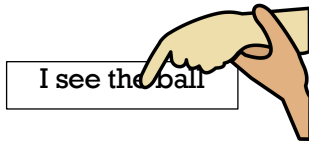
- Motor skills to press the button, start the computer recording, etc.
- Ability to imitate a vocal model



18

Textual Script Prompting Procedures

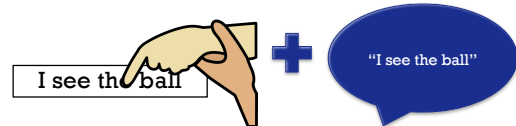
- First prompt level:
 - Combination of physical and vocal prompting procedures



19

Textual Script Prompting Procedures

- Second prompt level:
 - Combination of physical and vocal prompting procedures



20

Auditory Script Prompting Procedures

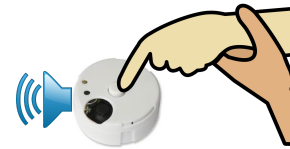
- First prompt level:
 - Combination of physical and vocal (recorded statement) prompting procedures



21

Auditory Script Prompting Procedures

- Combination of physical and vocal (recorded statement) prompting procedures



22

Script Fading

- Fade out the additional supports in the environment
 - Can include fading out words in text or audio
 - Can decrease the size of the cue in the environment
 - Transfer the support from the artificial cue to a cue commonly found in the environment
- Benefits of script fading
 - New untrained phrases
 - Helps to maintain new communication over time
 - Helps generalize new communication to new environments

Akers et al., 2016; Topuz & Ulke-Kurkcuoglu, 2021



23

Script Fading - Words

- Fade one word at a time back to front
- Same for auditory scripts – fade one word at a time back to front from recorded statement

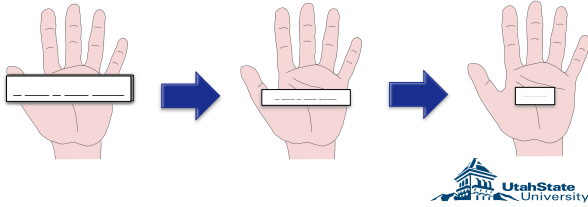
1. "I see the ball."
2. "I see the ____."
3. "I see ____."
4. "I ____."
5. ____



24

Script Fading - Size

- Once the words have been faded you can fade the size of the remaining cue until it is gone



25

Script Fading – Natural Cue

- Use scripts on things in the environment to transfer support to natural cues



26

Script Fading

- Making the script less conspicuous in the environment
 - Putting them on a key chain
 - Moving to using text messages, or having the script(s) on the phone



27

APPLICATIONS



28

Requesting

- Asking for things that are wanted or needed
 - It is important to garner an individual's motivation
- Types of requesting
 - Simple requests
 - Single phrase (Howlett et al., 2013)
 - Complex requests
 - Multiple phrases (Brodhead et al., 2015; Sellers et al., 2016)
 - Requests for information (Howlett et al., 2013)



29

Simple Request Example

- Skill: Simple "I want" requests
- Setting: School snack time
- Script Format: Textual script
- What will the script say: "I want ____"
- Teaching Procedure: Two prompt levels
- Fading: Fade one word at a time back to front and cue size



30

Simple Request Target Response



31

Simple Request 1st Prompt Level



32

Simple Request 2nd Prompt Level



33

Simple Request Fading Plan

- Remove words one at a time from front to back
 - "I want ____"
 - "I ____"
 - "____"
- Reduce the size of the cue on the table



34

Complex Request

- Skill: Simple Variations of types of requests
- Setting: School snack time
- Script Format: Textual script
- What will the script say: "I want ____", "Can I have ____", "Hand me ____", "I need ____"
- Teaching Procedure: Two prompt levels
- Fading: Fade one word at a time back to front and size



35

Complex Request Target Response



36

Complex Request 1st Prompt Level



37

Complex Request 2nd Prompt Level



38

Complex Request Fading Plan

- Remove words one at a time from front to back

I want _____	Can I have _____	Hand me _____	I need _____
I _____	Can I _____	Hand _____	I _____
_____	Can _____	_____	_____
_____	_____	_____	_____

- Use colors alone to cue response
- Reduce size of cue



39

Social Initiations

- The skill of orchestrating interactions, not simply responding to others
 - Play based initiations
 - Initiating play (Reagon & Higbee, 2009)
 - Commenting during play (Ganz et al., 2008)
 - Conversation Skills
 - Social Initiations (Gallant et al., 2017; Ganz et al., 2008)
 - Conversation Skills (Grober & Charlop, 2017; Matos et al., 2019)



40

Play Initiations

- Skill: End play with peer
- Setting: Free time
- Script Format: Audio Script – Mini Me
- What will the script say: “Thanks for playing”
- Teaching Procedure: Two prompt levels
- Fading: Fade one word at a time back to front



41

Play Initiation Target Response



42

Play Initiation 1st Prompt Level

Play Initiations First Prompt



43

Play Initiation 2nd Prompt Level



44

Play Initiations Fading Plan

- Remove words one at a time from front to back
 - "Thanks for playing"
 - "Thanks for"
 - "Thanks"
 - Just the button
 - Remove the button



45

Conversation Skills

- Skill: Conversations during play
- Setting: Free time
- Script Format: Text messages
- What will the script say: "Want to play blocks?", "I like your tower", "Let's play again", "That game was fun"
- Teaching Procedure: Pre-train how to use a cell phone
- Fading: Fade one word at a time back to front, stop sending messages



46

Conversation Skills

- Pre-requisite skills
 - Reading may be important for this type of skill as it will allow for novelty and variability to the materials used
- Pre-teaching
 - Teach individual what to do when a text message notification has been received
 - It may also be important to teach the individual to vocally repeat the text message received (typical prompting procedure)
- Reinforcement
 - Due to the difficulty of this skill and the multiple exchanges it may be necessary to add extra reinforcement during the teaching process



47

Conversation Skills



48

Conversation Skills - Fading



49

Work Settings

- Types of communication that may be needed in the workplace:
 - Requests
 - Confirmations
 - "Okay"
 - Pleasantries
 - "Thank you"
 - "Sorry for interrupting"



50

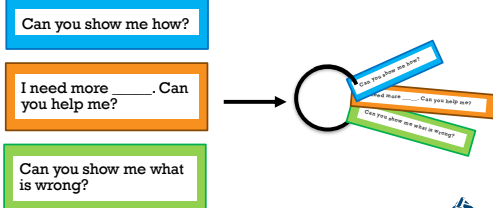
Requesting for Help with a Task

- Skill: Requesting for help with completing a work task
- Setting: Work- Making Copies
- Script Format: Textual script
- What will the script say: "Can you show me how?", "I need more _____. Can you help me?", "Can you show me what is wrong?" (Grob et al., 2019)
- Teaching Procedure: Two prompt levels
- Fading: Fade script size and put on a key chain



51

Fading the Scripts



Grob et al., 2019



52

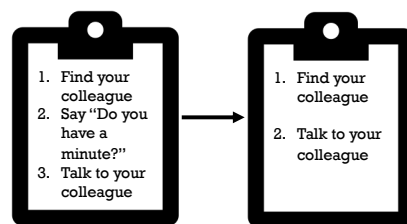
Requests and Pleasantries

- Skill: Requesting for someone's time and thanking them
- Setting: Work- Office
- Script Format: Textual script as part of instructions
- What will the script say: "Do you have a minute?", "Thank you for your time." (Yamamoto & Isawa, 2020)
- Teaching Procedure: Two prompt levels
- Fading: Fade scripts out of instructions



53

Fading the Scripts



54

Script Planning Resource- Activity

- Think of someone who might benefit from the use of script(s)
- Use the **Script Planning Resource** to guide you in creating a plan, by answering each of the questions in the resource



55

Script Planning Resource	
Think of the individual you want to use script(s) with. Use this worksheet to help you create a plan for creating, teaching, and fading scripts.	
1. What skill are you trying to teach with script(s)?	_____
2. Where does the individual need to use the script(s)?	_____
3. What type of script(s) do you want to use?	_____
a. What are the prerequisite skills to use this type of script?	
i. Does the individual have the prerequisite skills? YES/ NO	
b. What type of technology is needed? (none, one, cell phone, etc.)	
c. Do you have access to the required technology? YES/ NO	
4. What should the script(s) say?	_____
a. Do you want to include and teach a variety of script(s)? YES/ NO	

5. How will you teach the script(s)?	_____
a. What type of prompting will you use?	
b. Where will you teach the individual to use the script(s)?	

6. What is your plan for fading the script(s)?	_____

a. Do you plan on fading how automatic the script(s) are in the environment? YES/ NO	
b. IF YES, how will you do that?	



56

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57



Thank you!



58