

Autism Initiative: Training Series

Module 5: Communication in Social Interaction Chapter 5.1: Conceptual Introduction

Part 1: Effective Communication and Quality of Life

Summary

Effective communication is a key component for an enhanced quality of life. However, intentional, or purposeful, spontaneous communication is a core deficit for individuals with autism. This portion of Chapter 5.1 will define communication and outline examples of how the core symptoms of autism can interfere with the development of functional communication.

Learning Objectives

1. Define communication.
2. Describe how self-stimulatory behavior can affect the development of communication skills.
3. Identify methods for helping individuals with autism to understand what is said to them.

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Module 5: Communication in Social Interaction Chapter 5.1: Conceptual Introduction

Part 1: Effective Communication and Quality of Life

Slides

A Key to a Quality of Life: Effective Communication

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Effective Communication: Overview & Issues

20 Minutes

Communication

- "Any act by which one person gives to or receives from another person information about that person's needs, desires, perceptions, knowledge, or affective states. Communication may be intentional or unintentional, may involve conventional or unconventional signals, may take linguistic or nonlinguistic forms, and may occur through spoken or other modes."

(National Joint Committee for the Communicative Needs of Persons with Severe Disabilities, 1992, p. 2)

Speech-Language Issues In ASD

- Non-communicative (lack of intentionality)
- 20-30 % may fail to develop functional speech
- Deficits in language comprehension

Speech-Language Issues In ASD

- Deficits in comprehension and use of gestures
- Deficits in the comprehension and use of prosody

Speech Language Issues in ASD

- Impoverished lexical representation
- Atypical lexical organization
- Deficits in abstract language

ASD

- Understanding the unique learning characteristics of individuals with ASD can greatly enhance your ability to provide effective services
- The unique learning characteristics directly impact on communication skills, behaviors, and independence

Basic Assumptions About Autism

- Stimulus Overselectivity

– There is a large body of research that suggests children with autism may respond to an overly restrictive portion of complex stimuli.
(e.g., Lovaas, Koegel, & Schreibman, 1979; Koegel, Koegel, Fleg, & Smith, 1995)



Autism

- Process Environment Differently
 - Difficulty processing transient input (Schuler, 1990)
 - Difficulty processing multiple cues (Lovaas, Schreibman, Koegel, & Rahn, 1971)
 - Reduced awareness of theory of mind (Baron-Cohen, Leslie, & Frith, 1985)

Autism

- Reduced Observational Learning
 - Children with autism typically have a great deal of difficulty with imitation
 - Children with autism have great difficulty "picking things up" from the environment

Autism

- Disorder versus Delay
 - Scattered profile
 - Splinter skills

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Module 5: Communication in Social Interaction Chapter 5.1: Conceptual Introduction

Part 1: Effective Communication and Quality of Life

Slide Summary

Slide 1:

It's important to really understand what communication is. It's an act of giving or receiving information about your needs, desires, perceptions and affective states. It can be intentional or unintentional. It may involve conventional or unconventional signals that take either linguistic or non-linguistic forms. In essence, everybody communicates. The trick is, determining whether the communicative acts are intentional or unintentional? In addition, it is important to understand that communicative acts can be conventional and unconventional. When working with individuals with communication difficulties we want to alter their communicative acts to make them intentional and conventional.

Slide 2:

Autism is one of the only populations where there may be a lack of intentionality with respect to communication. Especially when working with young children with autism. Often it appears that they do not understand the concept of intentionality. For example they may know how to produce the ASL sign for "bathroom" and understand that they should use the sign when they need to go to the "bathroom" but do not use it functionally (i.e., seek another's attention before producing the sign) to tell others that they need to use the bathroom. Teaching intentionality to individuals with autism is particularly challenging, as we don't know how typical children learn this concept.

Slide 3:

As many as twenty to thirty percent of individual with autism fail to develop functional speech, and we'll talk later about what functional speech is. Another issue related to communication and individuals with autism is the issue of comprehension deficits. In fact, it is often the case that their comprehension deficits may be more pervasive than their expressive skills. We make assumptions of what people on the spectrum understand based on their expressive skills and often times, it's a mismatch.

Slide 4:

In addition to difficulties understanding the verbal speech of others, individuals on the spectrum often have trouble understanding gestures and body language. Further, they have problems with understanding the more subtle aspects of language and communication such as prosody, which is the intonation of language.

Slide 5:

Understanding language processing will help you determine why an individual with autism is being non-compliant. Is it because he isn't motivated or because he doesn't have the skills to do what is being requested? Individuals with autism have abstract language deficits. Often people talk about Asperger's or high functioning autism as a "mild" version of autism. If you can see how challenged a person's life is with Asperger's you would not consider it mildly severe.

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Slide 6:

This presentation will spend a few minutes talking about really understanding autism itself, to the best of our abilities and how the learning characteristics impact on communication and impact on behaviors.

Slide 7:

One of the things we know about individuals with autism is that they have stimulus overselectivity; they often overselect on something. That is, they may focus on the wrong or irrelevant aspects of communication and language.

Slide 8:

For the most part the repetitive behavior we see in people with autism is often done because they like to do it, it feels good, it's something they enjoy, and it's entertainment. There is this inverse relationship between learning and high rates of self-stimulatory behavior and appropriate behavior and stereotypy. If you are engaging in hand flapping you are probably not engaging in appropriate behavior with your hands.

Slide 9:

It's a vicious cycle. High rates of stereotypy leads to impaired learning which leads to fewer skills acquired which leads to continued absence of alternative behaviors, which then leads to high rates of stereotypy. You need to look at how much this is interfering with independence and work on trying to promote as much independence as possible.

Slide 10:

Individuals with autism process the environment differently. One of the most important things you can understand about individuals with autism is the idea that they have a really hard time with transient input. There is nothing more transient that you will ever process than speech. It is there and it is gone. We are capable of being able to process long utterances. People with autism often aren't able to do this because of processing issues. The theory of mind is this whole idea that I have to know that you don't know everything I know. For example, the classic 2 year old, who thinks they can't be seen when they close their eyes because they can't see you. Theory of mind isn't developed until about 4. Some individuals with autism may never develop the theory of mind.

Slide 11:

Individuals with autism aren't necessarily just going to pick things up from the environment. They are not necessarily going to model their peers.

Slide 12:

Autism is a disorder; it is not a delay. The skills of individuals with autism vary greatly within and between individuals. You may have someone who can't tie their shoes or say a single word but can put together a 600-piece puzzle. You aren't going to see that with people with pure developmental delays.

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Part 1: Effective Communication and Quality of Life

References

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2. Koegel, R. L., Koegel, L. K., Frea, W. D., & Smith, A. E. (1995). Emerging interventions for children with autism: Longitudinal and lifestyle implications. In R. L. Koegel, & L. K. Koegel (Eds.), *Teaching children with autism: Strategies for initiating positive interactions and improving learning opportunities*. (pp. 1-15). Baltimore, MD, US: Paul H Brookes Publishing.
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Module 5: Communication in Social Interaction Chapter 5.1: Conceptual Introduction

Part 2: Supporting Functional, Intentional and Spontaneous Communication

Summary

When supporting individuals with autism, the need to support communication is implied. In fact, many adolescents and adults with autism may not understand that communication is something that is used to engage with other people. This section of the chapter will highlight the importance of supporting intentional, functional, and spontaneous communication to meet the needs of these individuals as they learn and develop independent skills. Also, methods for creating opportunities to communicate are reviewed.

Learning Objectives

1. Identify the primary difference in communication between individuals with autism and other developmental disabilities.
2. Identify ways to create opportunities for communication.
3. Identify research-based strategies to promote initiation and social language.

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Module 5: Communication in Social Interaction Chapter 5.1: Conceptual Introduction

Part 2: Supporting Functional, Intentional and Spontaneous Communication

Slides

Supporting Effective Communication

- Intentionality and communication
- Speech
- Language

Intentionality

- One of the primary distinctions between individuals with ASD and other developmental disabilities is this deficit in intentional communication
- Even when children are taught to communicate, it is often limited to instrumental reasons (as opposed to social or personal)

Intentional/Spontaneous Communication

- Not something that is typically taught
 - Which means we are working in the dark a bit
- Have developed pretty effective strategies to promote spontaneous instrumental communication
- Still quite challenged by the "social" initiation

Promoting Spontaneity

- Fading to the establishing operation
- The "minimal speech" approach
- Proximal communication
- Communicative temptations
- Up the ante

The Minimal Speech Approach

- Reducing amount of verbalizations or reducing length of utterance to facilitate comprehension
- May rely on "key words" alone

Proximal Communication

- Use of non-verbal strategies to encourage initiations
- Bursts of activity with pauses
- Interruption of highly preferred activity

Creating Opportunities for Communication

- Routines
- Communicative temptations
Prizant & Wetherby (1993)
- Songs

Up the Ante

- Expect just a little more during non-conventional initiations
- E.g.: The individual takes your hand and leads you to the juice, prompt the sign for drink rather than responding to the lead.

Research Based Strategies to Promote Initiations and Social Language

- Video Modeling
- Scripts
- Fading to the EO
- Schedules
- Mand Training

Social Communication

- Difficult to "understand" or contrive the EO for social initiations
- May want to consider strengthening "responding behavior" as well as vocabulary

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Module 5: Communication in Social Interaction Chapter 5.1: Conceptual Introduction

Part 2: Supporting Functional, Intentional and Spontaneous Communication

Slide Summary

Slide 1:

When you want to support effective communication with people with autism, you have to support them in a lot of areas, including intentionality and communication. They may not know that when they are thirsty, they should ask for a drink.

Slide 2:

Individuals with autism do not always understand that communication is a two-sided process and should involve another person.

Slide 3:

We are working in the dark, without curriculum. While we have developed strategies to get learners to ask for things, we are still struggling to get people with autism to talk for social reasons.

Slide 4:

This slide presents some general concepts to help parents and staff become more communicative with people with autism. These will be talked in more detail over the next few slides.

Slide 5:

Minimal speech approach means exactly what it says, stop talking as much. Individuals with autism often have language-processing problems. When speaking to individuals with language-processing issues it is important to focus on key words, give them enough time to respond, and don't talk for them. It is important to understand that using minimal speech doesn't mean using baby talk.

Slide 6:

Proximal communication means doing things to promote communication. An example would be taking the remote and pausing a preferred show or movie to get someone to initiate a communicative exchange and ask for it to be put back on.

Slide 7:

Routines and communicative temptations are traditional ways to promote communication. For example, when they ask for soda, give them a big bottle without a cup so that they will have to ask for a cup.

Slide 8:

Upping the ante means you just want to get a little bit more. This could be as simple as getting an individual to look at you before delivering a request. The trick to this is that you have to know what an individual is capable of first. You have to know whom you are working with so you know what you can expect.

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Slide 9:

This slide presents some more research-based strategies. There's a lot more research out there and a lot more published on these strategies now. Focusing on the establishing operation, which is the reason we communicate. We don't teach to request things for the correct establishing operation. For example, we teach to ask for a drink of water, but we don't teach to ask for that drink when they are actually thirsty. We need to teach to the establishing operation, meaning we need to teach them the reason to ask for a drink of water is because they are thirsty.

Slide 10:

We struggle to teach social communication because we don't always know what the establishing operation is. Why does someone make a social comment? That's why we should try to strengthen responding behavior. We should teach them to respond consistently. Being a good responder will recruit social attention. Being a poor responder will actually eliminate it.

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Part 2: Supporting Functional, Intentional and Spontaneous Communication

References

1. Prizant, B. M., & Wetherby, A. M. (1993). Communication in preschool autistic children. In E. Schopler, M. E. Van Bourgondien & M. M. Bristol (Eds.), *Preschool issues in autism*. (pp. 95-128). New York, NY, US: Plenum Press.

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Module 5: Communication in Social Interaction Chapter 5.2: Strategies for Intervention

Part 1: Functional Speech and Augmentative Communication

Summary

Part 1 of this chapter focuses on functional speech and the use of augmentative and alternative communication methods. This section will review "back-up" systems for communication and issues with language comprehension for adolescents and adults with autism.

Learning Objectives

1. Define functional speech.
2. Define augmentative communication system.
3. Identify some examples of augmentative and alternative communication systems.

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Module 5: Communication in Social Interaction Chapter 5.2: Strategies for Intervention

Part 1: Functional Speech and Augmentative Communication

Slides

**Effective Communication:
Intervention**

60 Minutes

Speech

- The key is term is "functional"
- Functional speech means that the speaker can be understood by all listeners in all contexts
 - Consider the stranger test periodically
 - Sometimes you need to "wait" and not to – initial attempts if not intelligible

Functional Speech

- If participant has speech but is NOT intelligible in all situations with all listeners:
 - Must consider AAC

AAC

- **Augmentative**- "any approach designed to support, enhance, or supplement the communication of individuals who are not independent verbal communicators in ALL situations" (Nicolas, Henryman, & Kriesheck)
- An augmentative communication system supports *existing language and communication skills*.

AAC

- Can range from teaching gestures to use of voice output systems
- Examples of AAC include:
 - Picture boards/wallets
 - PECS
 - Signs
 - Voice output systems

AAC

- Consider teaching system as "backup" system. Learner must be able to understand concept of "not being understood".

Examples of "Backup Systems"

- Card in wallet with personal information such as address, phone number, specific medical alerts
- Picture wallet
- Pictures posted in key locations (e.g., fridge, closet)
- Signs

Language Comprehension

- In some cases, expressive skills are better than receptive skills.
- Must be very thorough when assessing the individual's language comprehension
- Often, individual may rely on visual and environmental cues for comprehension

Language Comprehension

- Plays a critical role in development of speech
- Individual with ASD may appear to be "non-compliant" or defiant when in actuality, it is simply lack of comprehension

Language Comprehension

- Continue to expand vocabulary
- Teach concepts across multiple environments
- Be aware of visual supports
- Explicit programming to promote abstract and non-literal comprehension

Abstract and Non-Literal Language

- Must work on comprehension of gestures and prosody
- Must be aware of participants limitations with regard to non-literal language
- Teach compensatory skills

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Module 5: Communication in Social Interaction Chapter 5.2: Strategies for Intervention

Part 1: Functional Speech and Augmentative Communication

Slide Summary

Slide 1:

This chapter will discuss effective communication interventions.

Slide 2:

Functional speech means that the speaker can be understood by all listeners in all contexts. It often happens that individuals with autism can be understood by people that are close to them but not by others. This can be very frustrating, as they don't understand why they aren't being understood. It's important to periodically do the stranger test, meaning to have a stranger listen and see if they understand them.

Slide 3:

If they are not intelligible under all conditions to all listeners then you should consider the use of augmentative communication systems.

Slide 4:

Augmentative is any approach designed to support, enhance, or supplement the communication of individuals who are not independent verbal communicators in all situations. We all use augmentative communications, such as gestures. Augmentative communication supplements your ability to communicate. It supports existing abilities.

Slide 5:

Some examples of augmentative communication include picture boards and wallets, PECS (Picture Exchange Communication Systems), signs, and voice output systems.

Slide 6:

Augmentative communication should be taught as a back-up system. These systems were not all designed specifically for individuals with autism. Individuals with autism often don't have the desire to communicate for social purposes. Individuals with autism may need to be taught to get their book or device to use it to communicate.

Slide 7:

Other back-up systems include: communication wallets with personal information and medical alerts; a picture wallet if they can't use the print; pictures posted in key locations such as pictures of favorite foods on the refrigerator.

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Slide 8:

Receptive skills may be less evolved than their expressive skills. You must be very thorough when assessing comprehension skills. You must continually assess comprehension skills and let everyone in the environment know what they are. Without a thorough assessment of comprehension skills you run the risk of attributing failure to comply with an instruction to non-compliance when in actuality it is due to delays in receptive communication skills.

Slide 9:

People who have no receptive language skills will not have speech. They may have language but speech is contingent upon developing receptive language. Receptive language is often a contributing factor to making individuals look non-compliant.

Slide 10:

Some ways to enhance language comprehension include: do a really good assessment; continue to expand vocabulary; teach concepts across multiple environments to ensure they are not selecting on something irrelevant; be aware of visual supports; be really good at working on abstract and non-literal comprehension such as sarcasm.

Slide 11:

To help people with autism gain non-literal comprehension work on comprehension of gestures and prosody. Sometimes it's not about changing the behavior of the participant, it's about changing the behavior of the people who live with and support the participant.

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Module 5: Communication in Social Interaction Chapter 5.2: Strategies for Intervention

Part 1: Functional Speech and Augmentative Communication

References

1. Nicolosi, L., Harryman, E., & Kresheck, J. (1989). *Terminology of communication disorders: Speech-language-hearing (3rd ed.)*. Baltimore, MD, US: Williams & Wilkins Co.

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Module 5: Communication in Social Interaction Chapter 5.2: Strategies for Intervention

Part 2: Expanding Vocabulary

Summary

Part 2 of this chapter focuses on defining the lexicon, or mental dictionary, that we all use to communicate. Also, the importance of fluency and flexible use of language skills is emphasized in relation to functional communication and quality of life.

Learning Objectives

1. Define lexicon.
2. Learn how lexical deficits can effect communication for individuals with autism.
3. Identify compensatory skills to help with lexical deficits.

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Module 5: Communication in Social Interaction Chapter 5.2: Strategies for Intervention

Part 2: Expanding Vocabulary

Slides

The Lexicon

- "Mental dictionary"
- Contains all information we know about a word, including:
 - How it sounds
 - It's meaning
 - How it appears when written
 - How is it used in a sentence



Role of Vocabulary in Language Processing

- Common words are recognized faster than uncommon ones - or the *frequency effect*
- *Words in context are recognized faster than out of context words - or the context effect*

The Lexicon

- The strength of connections depends on the magnitude of activation occurring on a particular connection and between particular representations.
- The more activation occurs on a connection the stronger it gets and the faster the processing on that connection.
- High frequency words result in greater magnitude of activation than low frequency words
 - They possess stronger connections and their processing requires less time

Autism and the Lexicon

- Reduced use of language results in reduced connections as well as strength of connections
- Failure to benefit from linguistic context contributes to slowed activation

Treatment Implication

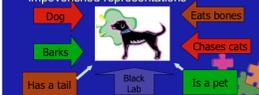
- Building fluency
- Flexible meanings and multiple meanings
- Expanding representation
 - Category programs
 - Semantic maps
 - Association drills

Fluency

- Fluent use of vocabulary
 - Accuracy of receptive and expressive naming is insufficient. Fluent receptive and expressive drills should be included to strengthen representation.

More on Vocabulary

- One theoretical assumption about a learner with autism is that he or she has impoverished representations



Even More on Vocabulary

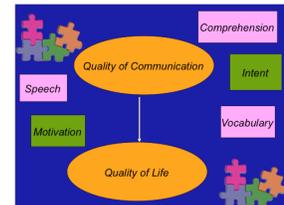
- Functional vocabulary
 - A learner must have sufficient vocabulary to express his or her wants and needs
- Functional vocabulary
 - A learner must have the appropriate vocabulary to be able to participate in interactions and conversations with peer groups

Final Words on Vocabulary

- Many adults may have sufficient vocabulary but the problem lies more in "use"
- Changing nature of needs (both vocabulary and social responses) must be considered and taught

Compensatory Skills

- Following up with an AAC system when not understood by the listener
- Providing visual accommodations to support comprehension
- Teach individual to ask for clarification or help when situation is unclear



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Module 5: Communication in Social Interaction Chapter 5.2: Strategies for Intervention

Part 2: Expanding Vocabulary

Slide Summary

Slide 1:

The lexicon is our language dictionary. It's where everything we know about language is stored in your brain. Pretend that the lexicon is a filing cabinet in your brain and each word that you know is a file in the cabinet and in each file you have the sounds of the word, what it means, how it looks in print, etc.

Slide 2:

Nothing happens faster than language processing. Language processing is automatic. For example, when you hear the word "bone," all these words in your mental lexicon would become open. It's highly probable that if you hear the word "bone," you will think "dog."

Slide 3:

People process common words faster than uncommon words and words in context are recognized faster than words out of context. Individuals with autism don't have nearly as large of a vocabulary as a typically developing person and they do not process language the same as a typical person. People with autism have difficulties with the frequency effect and the context effect. The same thing happens with language comprehension.

Slide 4:

The way we process language is contingent upon the number of files we have in our brain and what's in those files. For the average person you have tons of files and in each file is tons of information and they are all interconnected. The number of files, how often those files are used and the strength of connections to other words is what allows you to process language rapidly.

Slide 5:

Individuals with autism don't form these connections as readily as typically developing individuals; they don't have as many words and context doesn't always facilitate comprehension.

Slide 6:

Building fluency, flexible meanings, multiple meanings and expanding representation are all ways to help people with autism expand their language comprehension.

Slide 7:

Fluency means that you are able to process language rapidly. Rate is very important when it comes to language. Being able to identify words with 100% accuracy is great, but if it takes two to three minutes to identify a picture, you will not be able to use that skill in the natural environment.

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Slide 8:

Individuals with autism don't have as much information inside the lexicon. For example, they may know that a dog barks, but they most likely do not know that dogs eat bones and chase cars because we don't teach it.

Slide 9:

There are two key components to functional vocabulary. First, are you teaching the person that you are supporting words and communication skills that are functional to him or her? Secondly, we have to determine what the people we are supporting are talking about so that they can communicate with their peer groups. Vocabulary impacts ability and desire to communicate with others.

Slide 10:

We need to understand that just because someone can label something doesn't mean that they understand that they can use it as a social request. They might not understand the establishing operation.

Slide 11:

Some other compensatory skills include following up with the augmentative communication system, providing visual accommodations to support comprehension and teaching how to ask for clarification when the situation is unclear.

Slide 12:

The quality of communication is contingent upon having good comprehension, understanding communicative intent, having words to get your needs met, having speech that people understand and if not, having a back-up systems and being motivated, understanding what the establishing operation is. If you are capable of having an effective communication system, you will have a much higher quality of life.

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Module 5: Communication in Social Interaction Chapter 5.2: Strategies for Intervention

Part 2: Expanding Vocabulary

References

1. Nicolosi, L., Harryman, E., & Kresheck, J. (1989). *Terminology of communication disorders: Speech-language-hearing (3rd ed.)*. Baltimore, MD, US: Williams & Wilkins Co.

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 1: Challenges Implementing Communication Programs

Summary

This portion of Chapter 5.3 covers the challenges faced when implementing communication-training programs in a treatment system. Included are: specific issues and concerns regarding speech, language, and communication skills for adolescents and adults with autism.

Learning Objectives

1. Recognize the importance of teaching communication skills to adolescents and adults with autism.
2. Learn the importance of conducting communication goals across settings and individuals.

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 1: Challenges Implementing Communication Programs

Slides



**Effective Communication:
Programmatic Issues**

60 Minutes



**Adolescents and Adults
with ASD:
What do we Know?**

- Adult outcomes have been shown to be heavily dependent upon whether the individual developed useful and sufficient speech and language
Lotter (1978); Mawhood, Howlin, & Rutter (2000)
- 40-50 % of adults with autism do not develop sufficient language to meet their daily communication needs
Wing & Attwood (1987)



**Adolescents and Adults
with ASD:
What do we Know?**

- Speech and language skills do continue to improve in adolescence and adults with autism
Williams (2001); Mawhood, Howlin, & Rutter (2000)
- Despite improvements in speech and language, levels of communication competence remain severely compromised
Mawhood, Howlin, & Rutter (2000)
- As many as 12-20 % of adults with ASD demonstrate little or no speech
Howlin, Goode, Hutton, & Rutter (2004)



**Adolescents and Adults
with ASD:
What do we Know?**

- A follow up study of over 60 individuals with autism (with a non-verbal IQ of 50 or higher) found:
 - The majority of individuals remained highly dependent in work and home settings
 - 50 % remained socially isolated
 - Many continue to demonstrate autistic like behaviors including rituals, stereotyped and obsessions
 - The higher the linguistic scores as adults, the more likely the individual did well on other outcome measures
Howlin, Goode, Hutton, & Rutter(2004)



**Adolescents and Adults
with ASD:
What do we Know?**

- Historically, parents of adults with autism comment on the fact that most day programs do not emphasize the acquisition and use of language and communication skills. Unfortunately, for many, the skills learned in school may be lost.
Van Bourgondien & Schopler, E. (1996)



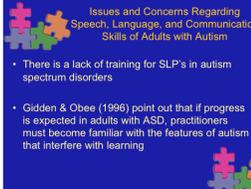
**Issues and Concerns Regarding
Speech, Language, and Communication
Skills of Adults with Autism**

- Many adult and residential programs do not provide access to an SLP or speech-language services
- Yet the research tells us that:
 - 20-50 % of adults with autism may not have sufficient speech and language to meet their needs in their daily lives



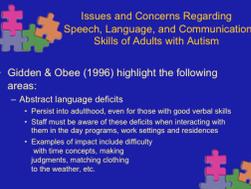
**Issues and Concerns Regarding
Speech, Language, and Communication
Skills of Adults with Autism**

- Need for speech-language services in adult and residential settings to address:
 - AAC issues
 - Designing assessment, support, management and training
 - Generalization to different environments
 - Updating and upgrading systems
 - Lack of initiation skills and on-going communication deficits
 - New language and communication requirements in work settings and adult social environment



**Issues and Concerns Regarding
Speech, Language, and Communication
Skills of Adults with Autism**

- There is a lack of training for SLP's in autism spectrum disorders
- Gidden & Obee (1996) point out that if progress is expected in adults with ASD, practitioners must become familiar with the features of autism that interfere with learning



**Issues and Concerns Regarding
Speech, Language, and Communication
Skills of Adults with Autism**

- Gidden & Obee (1996) highlight the following areas:
 - Abstract language deficits
 - Persist into adulthood, even for those with good verbal skills
 - Staff must be aware of these deficits when interacting with them in the day programs, work settings and residences
 - Examples of impact include difficulty with time concepts, making judgments, matching clothing to the weather, etc.

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 1: Challenges Implementing Communication Programs

Slide Summary

Slide 1:

This chapter will begin looking at more programmatic issues related to implementing communication programs for individuals with autism.

Slide 2:

Outcomes are heavily dependent on speech and language communication skills. Forty to fifty percent of adults with autism do not have sufficient communication.

Slide 3:

Speech and language skills continue to improve in adolescents and adults with autism. Despite the fact that we know we can continue to improve these skills, many of the adults we support continue to have severely compromised communicative competence. Part of the problem is that we are good at teaching speech and language but not as good at teaching communication. Twelve to twenty percent of adults with autism have little or no speech and we are not good at translating a method of communication into the adult services world. How will they ever get a job if they do not have an effective communication system? We need to think long-term.

Slide 4:

A study of sixty-eight individuals with autism found that the majority were dependent in work and home settings, fifty percent were socially isolated, many continued to have high rates of self-stimulatory behavior and also that the better the language skills, the better the long-term outcomes were. We want to start thinking about transitioning children to adult programs when they are eight to nine years old. We need to focus on independence, on-task behavior and communication skills.

Slide 5:

Parents complain about the fact that when their adults with autism age out of school programs and enter adult programs, that there are very little communication supports. As a result, many lose the skills that were taught to them. Often there is a disconnect between the school age and adult programs.

Slide 6:

Very few speech language pathologists actually take classes specific to working with individuals with autism.

Slide 7:

Some things that need to be addressed in adult residential settings include: augmentative systems (AAC) and someone to support and manage them; lack of initiation skills and on-going communication deficits and new language and communication requirements in work settings and adult social environment. For

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example, it's fine for a 3.5-year-old girl to say, "aren't I pretty?" and everyone thinks it's cute. It's not okay for a 30-year-old woman to say this.

Slide 8:

There is a lack of training for speech language therapists in autism. Research says adults with autism can make progress, but if you don't understand autism when working with adults with autism, they probably will not make progress.

Slide 9:

In their paper, Gidden and Obee say that we have to understand the areas of abstract language deficits and that these persist in adulthood even if you have good verbal language and that this is a bigger problem because people have higher expectations of adults. If you can speak in full sentences but do not understand, you can be viewed as non-compliant, when in reality you don't understand what's being said. Staff need to understand these deficits.

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 1: Challenges Implementing Communication Programs

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 2: Common Barriers in the Development of Communication

Summary

In this portion of the chapter, Dr. Gerenser will continue presenting issues and concerns in communication for adolescents and adults with autism, with special emphasis on lack of initiative to communicate and the influence of social skill deficits. Also, the most common barriers to effective communication will be explained, leading into the implication of motivational problems during skill development

Learning Objectives

1. Identify the skills correlated with good outcomes across all aspects of life.
2. List the 4 barriers to effective communication.
3. Identify 4 strategies for overcoming a lack of motivation to initiate communication.

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 2: Common Barriers in the Development of Communication

Slides

Issues and Concerns Regarding
Speech, Language, and Communication
Skills of Adults with Autism

- Gidden & Obee (1996) highlight the following areas:
 - Lack of initiative
 - Prompt dependency
 - Limited spontaneous communication
 - Social skills deficits
 - Poor conversation skills
 - Deficits in theory of mind and perspective taking

Summary and Conclusions

- Useful speech, language and communication skills in adults are highly correlated to good outcome measures across all aspects of life
- Almost half of adults with autism do not develop sufficient language to meet their daily communication needs
- At least 10-20 % of adults with autism require AAC systems

Summary and Conclusions

- Speech and language skills in individuals with autism do improve through adolescence and adulthood
- Autism specific deficits, however, often persist, despite other skill development (e.g., limited spontaneous communication, abstract language deficits)
- There is far less access to speech-language supports for adults with autism

Summary

- Barriers to Effective Communication
 - Non-functional speech
 - Receptive language deficits
 - Language and lexical processing deficits
 - Deficits in non-verbal communication

Summary

- Barriers to Effective Communication



Lack of Motivation

- Individuals with ASD may lack communicative intent and fail to understand the basic nature of communication
- Must teach to the establishing operation
- For social language, this becomes an even greater challenge: promoting social motivation

Lack of Motivation

- May have to settle for teaching the learner to be a good social responder
- Must establish fluent and consistent responding skills
- Must build sufficient vocabulary with an effective mode of communication

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 2: Common Barriers in the Development of Communication

Slide Summary

Slide 1:

Lack of initiative must be understood, that most people with autism do not ask for things under the right conditions. For example, we might think that because someone asks for a soda, that they are asking for it because they are thirsty, when in reality they are asking because they saw someone else open a soda.

Slide 2:

Useful speech, language and communication skills in adults are highly correlated to good outcome measures across all aspects of life. Good communication skills lead to a higher quality of life. Half of the adults with autism do not develop sufficient communication skills. 10-20% of adults with autism require AAC systems. This statistic only includes completely non-verbal adults with autism, so the numbers are actually higher when including adults that are verbal.

Slide 3:

Speech and language skills in individuals with autism do improve through adulthood, yet a lot of the problems that interfere often persist, so we need to be aware of them. There is far less access to speech-language supports for adults with autism.

Slide 4:

Some of the barriers that stand in the way of effective communication include non-functional speech, receptive language deficits, language and lexical processing deficits and deficits in non-verbal communication. Just because an individual with autism can be understood by the staff working with him in the home, doesn't mean he has functional speech that can be understood outside of the home. Their language and lexical processing will be slower. The non-verbal communication is more of an issue with the non-verbal population where they don't benefit from the non-verbal cues that we use all of the time.

Slide 5:

Barriers to effective communication that we can address are compensatory skills and lack of motivation. We can teach these skills. For example, we can teach an adult with autism to say he needs to make a phone call when he feels uncomfortable during a conversation. On his phone will be a list of conversation tips. Lack of motivation is about understanding the reason people do things and how you can control that. Some people clean their room because they like a clean room, while others clean it for a reward or to avoid getting yelled at by their mom.

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Slide 6:

Social language is challenging because we do not understand the social motivation. We must teach to the establishing operation.

Slide 7:

If there is a lack of motivation, it may be that we just have to teach them to be good responders. Individuals must have fluent and consistent responding skills for them to be a good responder. Building sufficient vocabulary with an effective mode of communication is also important for teaching an individual to be a good responder.

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Part 2: Common Barriers in the Development of Communication

References

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 3: Communication Fluency

Summary

In this final chapter component of Module 5, Dr. Gerenser summarizes key points made throughout her presentation and provides suggestions for effective service delivery. This includes the frequency and type of program goals within a treatment schedule. She concludes this chapter by highlighting the importance of specific training in autism for staff planning to work with adolescents and adults with autism, as their needs are very different than other individuals that may be receiving treatment or residential support.

Learning Objectives

1. Define quality of life and how it relates to communication.
2. Identify what predicts positive outcomes for adolescents and adults with autism.
3. Identify the most frequently noted components of a good quality of life.

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 3: Communication Fluency

Slides

Important Considerations

- Schedule and Service Delivery
 - Consultation model should be considered
 - Schedule must be flexible to allow for services across settings

Important Considerations

- Goals and Programs
 - Vocabulary expansion
 - Changing social questions
 - Spontaneity

Important Considerations

- Goals and Programs
 - Functional communication training
- Social Skills
 - Hidden curriculum
 - Conversations skills
 - Etc.

AAC

- Issues of system management
 - Repairing system when broken
 - Insuring people in individual's environment are familiar with system/signs
- Use across multiple settings
 - Insuring system is always available
 - Insuring vocabulary is appropriate and functional across multiple settings

AAC

- Keeping system current
 - Someone must update system regularly
 - Teach new signs/add new pictures
- Funding challenges

Autism

- Issues with Motivation
 - Do not respond to social reinforcers in the beginning
 - Difficult to determine what child is responding to in the environment; may have limited reinforcement repertoire

Important Considerations

- There is a direct correlation between having effective communication skills and challenging behaviors

Effective Communication Skills = Fewer Challenging Behaviors

Important Considerations

- Staff supporting individuals with ASD must receive sufficient training in:
 - the unique learning characteristics of individuals with ASD
 - strategies to support effective communication

Quality of Life

- **Quality of Life** is the product of the interplay among social, health, economic and environmental conditions which affect human and social development.

Ontario Social Development Council, 1997

Quality of Life

- In QOL surveys, the following are the most frequently noted components of a good quality life:
 - A good job
 - Quality relationships (with quality more highly rated than quantity)
 - Physical well being

QOL and ASD

- Better QOL

Low Rates of Problem Behavior is Correlated with Better Communication Skills

Communication and QOL

- It has been estimated that 75 % of a person's day is spent communicating in some way

QOL Factors

- Quality Relationships: Involving and listening conversations
- Physical Well Being: Communicating wants and needs, Warning, pain or danger

Communication and QOL

A Good Job

Effective communication skills are not only essential in getting a good job but they are also key to being successful on the job.

In a Wall Street Journal Survey of over 400 companies, employees ranked "communication abilities" as the #1 desirable quality of future employees.

It all comes back to:
Effective Communication

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 3: Communication Fluency

Slide Summary

Slide 1:

Some of the more programmatic issues that we struggle with when dealing with the adult services world include how do we get access to this service? The consultation model should be considered. Your schedule should be flexible so that you see participants across all environments.

Slide 2:

Some of the goals that we would address in terms of programming would include vocabulary expansion, changing social questions and spontaneity. Social questions for a 6 year old will not be the same as the social questions a 14 year old should be able to answer. For example, a 6 year old would not be expected to order his own meal at a restaurant, but a 14 year old would be expected to do so.

Slide 3:

Functional communication training should be part of every training program. It's a critical component of helping individuals with autism. Hidden curriculum is simply things that we all know, but where did we learn it? Where did we learn that you do not use the urinal right next to someone else? Nobody taught you these things but you just know. Somebody needs to address these skills and conversation skills with people with autism because they will not just know these things.

Slide 4:

Some of the other roles that a speech language pathologist has include repairing communication systems, making sure that the system is functional across environments and making sure that the vocabulary on the system is function for the setting they are in. There is no reason for work vocabulary to be mixed in with leisure vocabulary.

Slide 5:

It's also important to keep the systems current. Technology changes often. Who is finding the money to keep up with these changes? These are all issues that we are facing, especially when children are aging out of school-aged programs.

Slide 6:

It's difficult to determine the motivation behind behaviors. It's difficult to determine what someone is responding to in the environment.

Slide 7:

There is a direct correlation between effective communication and challenging behaviors. If you have effective communication skills you will have fewer challenging behaviors.

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Slide 8:

Staff who are supporting individuals with autism must receive training in dealing with individuals with autism. They must receive training in the unique learning characteristics of individuals with autism and they must learn strategies to support effective communication. People with autism are very different than people with mental retardation.

Slide 9:

Quality of life is really our goal. Quality of life is the product of the interplay among social, health, economic and environmental conditions, which affect human and social development (Ontario Social Development Council, 1997).

Slide 10:

The three most prominent areas that typical adults talk about when they describe themselves as having a good quality of life is having a good job, having a quality relationship and physical well-being.

Slide 11:

Quality of life in people with autism: We know that quality of life is correlated with quality of communication and low rates of behavior problems. A low rate of behavior problems is correlated with better communication skills.

Slide 12:

Seventy-five percent of your day is spent communicating in some way. In order to have quality relationships you need to initiate or at least sustain conversations. You have to understand what people are saying to you. People with autism have a really hard time communicating their wants and needs. People with autism have a really hard time expressing pain or danger. People with autism have a shorter life expectancy because they can't tell you when they are sick.

Slide 13:

Effective communication skills are not only essential in getting a good job but they are also key to being successful on the job.

Slide 14:

Every aspect of a quality of life comes back to being an effective communicator. If you are an effective communicator you will develop social relationships. If you are able to let people know that you are not feeling well you will have better physical well-being. If you have better speech and language abilities you are more likely to be employed.

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Module 5: Communication in Social Interaction Chapter 5.3 Programmatic Issues

Part 3: Communication Fluency

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