



## Considerations in Employment Supports for Individuals with Autism Spectrum Disorder

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## Learning Objectives

- Increase knowledge of...
  - employment outcomes for individuals with autism spectrum disorder (ASD).
  - factors related to employment outcomes in ASD.
  - a framework for guiding employment support practices.
  - various methods of support for individuals with ASD in employment settings.

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## Employment Outcomes

- Employment outcomes in ASD indicate.....
  - 50-75% unemployed.
  - Many underemployed.
    - Menial jobs relative to educational attainment.
  - Job instability common.
    - Social, behavioral and mental health problems.
  - Often earn less than other disability groups.

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**Employment Outcomes**

– 121% increase in Vocational Rehabilitation services in the past 5 years.

- Generic services, not ASD specific.
- Costly.
- Many denied services due to severity of the disorder.

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*Why these outcomes for ASD?*

*Factors related to employment outcomes*

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**Factors**

- Several factors reported to be related to employment outcomes ...
  - Individual characteristics.
  - Transition planning/preparation characteristics.
  - Employment site characteristics.

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## Individual Characteristics Factors

### ASD Features

- Social Communication & Interaction.
- Restrictive and repetitive patterns of interests, activities, and behavior.

### Related Conditions

- Intellectual & cognitive impairments.
- Language impairment.
- Emotional & Behavior Problems/Disorders.
- Adaptive impairments.

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## Individual Characteristics Factors

### Demographic Factors

- Female gender.
- High school graduate.

### Other

- Parental income.
- Parental education.
- Career counseling.
- Volunteer and job experience.

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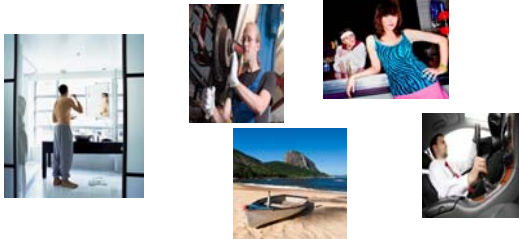
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## Individual Characteristics Factors

- ASD and related impairments can affect the development and application of skills needed to secure and maintain employment.



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### Individual Characteristics Factors

- Demographic and other factors may result in barriers to learning needed skills...
  - expectations for learning work skills.
  - opportunity for learning work skills.
  - participation and engagement in learning work skills.

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### Transition Planning Factors

- Inadequate or less than effective transition planning & preparation....
  - No evidence-based transition guidelines for ASD.....
    - Personnel may lack knowledge of ASD and how to modify transition practices to improve participation.
    - Current models may not be effective for ASD.
  - Limited opportunity to develop essential employment skills.
    - Professional, parent, and/or student may not be knowledgeable of strategies and/or resources to assist in effective vocational preparation.

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### Transition Planning Factors

- Insufficient capacity in state/regional vocational rehabilitation services.
  - Current service model may not 'fit' ASD needs, so may affect participation.
  - Student, parent, and/or personnel may not be knowledgeable of effective vocational preparation practices or resources that may be available to assist.
    - Reduced opportunity to develop skills.
  - Limited personnel to meet current demand.

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## Employment Site Factors

- Variability in the job market and local economy.
- Variability in employment settings with regard to supporting individuals with disabilities, including ASD.
  - Most private employment sites not specifically set up to accommodate individuals with ASD.
    - ADA requires reasonable accommodations, but employee must request and provide documentation.
    - NYS Economic Reforms (Olmstead Report) attempts to address some of these issues.

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## CONSIDERATIONS FOR ASD EMPLOYMENT SUPPORTS

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## Employment Models

- There are a number of employment models...
  - Competitive Employment
  - Business-led Employment
  - Supported Employment
  - Secure Employment
  - Sheltered Workshop

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## Employment Models

- No **ASD specific** employment support model or models have been identified.
  - One model is not likely to meet the needs of ALL individuals with ASD.
    - Varied interests and abilities will require different employment models and different combinations of support.
  - Limited research to inform evidence-based practice.
    - Particularly for those individuals with less cognitive impairment.

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## Best Practice Framework

- ‘Best clinical practice’ suggests an *Ecological Framework* may best guide employment support practices.
  - Determination of support needs based on assessment of the individual and the employment context.
  - Support & training provided in the employment setting.
  - Provision of specific employment support specialists as needed.

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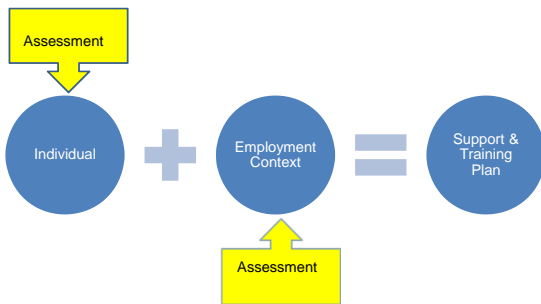
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## Ecological Framework



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### Assessment

<p><b>Individual</b></p> <ul style="list-style-type: none"> <li>• ASD symptoms.</li> <li>• Cognitive &amp; neurocognitive profile.</li> <li>• Adaptive skills.</li> <li>• Social &amp; functional communication skills.</li> <li>• Emotional &amp; Behavioral health status.</li> <li>• Vocational skill set.</li> </ul>	<p><b>Employment Context</b></p> <ul style="list-style-type: none"> <li>• Policy &amp; Procedure.</li> <li>• Contextual assessment.</li> <li>• Job analysis.</li> </ul>
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### Assessment

- Assessment enables you to....
  - Specify the accommodations/supports needed.
  - Identify training needs.
    - Job specific skills: work tasks.
    - Job related skills: social and functional communication, emotional and behavior regulation.
  - Specify the training objectives.
  - Select the most appropriate instructional methods.
  - Determine the most appropriate training format.
    - When, where, who, how often, etc.

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### Support & Training Plan

- Develop a Support & Training Plan that addresses these core components...
  - Employer Preparation.
  - Workplace Supports.
  - Worker Training.
  - Long-Term Support.

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## Employer Preparation

- Provide guidance on how to promote policies of inclusion.
  - Provide ASD awareness training.
    - Supervisor and others, as appropriate.
- Provide training to supervisor(s) and others on how to make modifications to the work environment and/or to tasks to fit individual support needs.
- Provide training to increase supervisor ability to problem-solve worker difficulties.

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## Workplace Supports

- Structure the work environment.
  - Physical layout should support task initiation and completion.
    - Reduce/eliminate distractions/sensory stimuli.
    - Clearly define workspace.
      - Activity Schedule/Task Lists posted.
      - Visual supports posted.
      - All materials available.

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## Workplace Supports

- Structure the work environment.
  - Social & functional communication supports.
    - Social Stories
    - Communication Scripts
  - Behavioral (and emotional) supports.
    - Pro-social rules for successful worker relationships stated, posted and reviewed.
    - Contingency Management/Reinforcement Systems.
    - Support personnel (e.g., Supervisor, HR rep, Job Coach, Behavior Analyst, Other).
    - Formalized problem-solving policy/procedure.

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## Worker Training

- State training objectives in measurable terms.
  - Job Specific Skills.
  - Job Related Skills.
- Establish benchmark performance criteria for each skill you are targeting.
  - Based on skill and individual assessment data.

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## Worker Training

- Job Specific Skills: Common training methods.
  - Direct Instruction & Coaching.
    - Instruct-model-rehearse-error correct/reinforce-apply.
  - Task Analysis.
    - Break task down into steps.
  - Activity schedule/task list/other visual supports for task completion.
    - Can use technology such as iPad, Ipad, Tablet, Apps, etc.

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## Worker Training

- Job Specific Skills: Common training methods.
  - Chaining Methods: forward, backward, full task presentation.
  - Prompting & Fading.
    - Most to Least: New skill
    - Least to Most: Acquired skill
    - Shadowing & Graduated Guidance: New skill, acquired skill, & maintenance.
    - Can use technology for prompting/cueing.

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## Worker Training

- Job Related Skills: Common training methods.
  - **Social & Functional Communication Supports.**
    - Direct Instruction.
      - Instruction, model, rehearse, feedback/reinforce, apply.
      - Peer and/or support personnel.
    - Incidental Teaching.
      - Model-prompt/coach-error correct-reinforce.

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## Worker Training

- Job Related Skills: Common training methods.
  - **Social & Functional Communication Supports.**
    - Social Stories & Social Skill Stories.
      - Provides description of relevant work situations and the social expectations.
      - Embed scripts into story to prompt for learning when skills will be needed.
    - Communication Scripts.
      - Specific requests, comments, statements specific to identified work situations.

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## Worker Training

- Job Related Skills: Common training methods.
  - **Social & Functional Communication Supports.**
    - Joint Action Routines.
      - Identify/create opportunities for social-communication to occur during work routines.
      - Place communication scripts into Task List(s)/Activity Schedule(s).

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## Worker Training

- Job Related Skills: Common training methods.
  - **Behavioral & Emotional Self-Regulation.**
    - Social Stories.
      - Common situations that trigger upset and behavioral difficulty and strategies for self-regulation.
    - Coping & Problem-solving Scripts.
      - Specific strategies for identified situations.

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## Worker Training

- Job Related Skills: Common training methods.
  - **Behavioral & Emotional Self-Regulation.**
    - Employee Assistance Program.
      - Mental health counseling-Cognitive Behavior Therapy.
      - Problem-solving support.
    - Contingency management & other reinforcement systems.

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## Long-Term Support

- Identify and prepare natural job supports.
  - Supervisors.
  - Project team members.
  - Co-workers.
- Identify and provide external job supports.
  - Job coach/supported employment staff.
  - Psychological or Behavioral services.
    - Focus on job related skills, problem-solving, anxiety/stress management, treatment of mental health and behavior problems.

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**FINAL CONSIDERATIONS**

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- Considerations**
- Providing effective and appropriate employment supports requires....
    - knowledge of ASD and co-occurring impairments and their affect on the individual's vocational performance.
      - Professional development & training often needed.
    - knowledge of how to establish and maintain an effective work environment by eliminating barriers.
    - knowledge of and access to various disability employment services.

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- Considerations**
- Providing effective and appropriate employment supports requires....
    - assessment of the individual and context (Ecological Assessment).
    - development of a support and training plan.
    - implementation of the plan.
    - evaluation of the individual's performance and adjusting the plan to be more effective.
      - » Collaboration with others for problem-solving work, performance, and behavior difficulties.

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# Resources

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- ## Resources
- To learn more about NYS employment initiatives for individual's with disability, visit the following websites:
    - Regional Economic Development Council Priorities:  
<http://regionalcouncils.ny.gov>
    - Department of Labor Regional Business Services Teams:  
<http://labor.ny.gov/workforcenypartners/ta/ta10-12.pdf>
    - Disability Employment Initiative in NY:  
[http://www.labor.ny.gov/workforcepartners/dpn\\_dei.shtm](http://www.labor.ny.gov/workforcepartners/dpn_dei.shtm)
    - Employment Services System:  
<http://www.nyess.ny.gov/>

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- ## Resources
- To learn more about NYS vocational assistance program, ACCES-VR, visit the following website.
    - <http://www.acces.nysed.gov/vr/do/home.html>
  - To learn more about considerations in employment for individuals with ASD, visit the following websites.
    - <http://www.autism-society.org/living-with-autism/lifespan/adulthood/employment.html>

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## Resources

- To download a free copy of a Supported Employment and Volunteer guide by the Alpine Learning Group (publications tab).  
– <http://www.alpinelearninggroup.org/>
- To download a free copy of the Adult Autism & Employment guide by the Missouri Disability Policy & Studies.  
– <http://dps.missouri.edu/Autism.html>

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## Resources

- Autism Speaks provides multiple resources including a Transition Toolkit, Visual Supports, & an Autism Apps listing. <http://www.autismspeaks.org/>
- The Geneva Center provides various tip sheets for visual supports and a Choice Board (see Visual Aids Gallery). <http://www.autism.net/>
- The RRCASD provides training DVD for Daily Schedules & Direct Instruction for Social Skills.  
– <http://www.urmc.rochester.edu/childrens-hospital/developmental-disabilities/RRCASD/Rochester-Regional-Center-for-Autism-Spectrum-Diso.aspx>

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## Resources

- Visit the Institute for Community Inclusion's website for a One-Stop Disability Resource manual.  
– <http://www.communityinclusion.org/onestop/saction7.pdf>
- To learn about more about situational assessment for support planning.  
– <http://www.dads.state.tx.us/providers/supportdeployment/presentations/ICISituationalAssessFactSheet.pdf>

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## Question & Answer

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