

Employment and Adults with Autism Spectrum Disorders

Facts

- Only about 25% of individuals with ASD are employed (Holwerda et al., 2012)
- 86 % of youth with ASD leaving school do not find a job
- Long term employment outcomes are very poor
- Inconsistent job histories
- Lack of career choices,
- Lack of workplace diversity

(Schall et al., 2011)

Yet, they have the ability and desire to work !

	%	%			
strength	Aspergers	NT	χ^2	p	Φ_{Cramer}
Attention to detail	73	34	43.26	.000*	.39
Logical reasoning	60	35	18.86	.000*	.26
Reliability	49	44	0.63	.426	.05
Focus	48	17	30.91	.000*	.33
Systemizing	47	29	10.05	.002*	.19
Consistency	40	19	14.61	.000*	.22
Visual skills	36	18	12.02	.001*	.20
Creative solutions	35	26	2.65	.104	.10
Retentiveness	35	14	16.61	.000*	.24
Repetitive tasks	32	10	23.04	.000*	.28
Numbers	29	08	20.32	.000*	.26
Organizing ability	24	29	1.13	.288	.06
Apprehension	24	21	0.35	.553	.04
Verbal skills	24	41	9.45	.002*	.18
Auditory skills	23	05	21.32	.000*	.27
Stamina	22	20	0.19	.667	.03
Proactiveness	17	19	0.16	.690	.02
Fine motor skills	11	06	1.93	.164	.08
Concentrativeness	10	05	2.10	.148	.09
Emotional control	09	15	2.96	.085	.10
Physical work	09	08	0.02	.895	.00
Flexibility	04	26	24.91	.000*	.29
Social skills	04	35	43.52	.000*	.39
Multitasking	01	17	22.14	.000*	.28
Empathy	01	41	65.50	.000*	.47
Team work	00	25	39.52	.000*	.37

The difficulties

- Impairments in verbal and non verbal communication
- Social relationship difficulties
- Improper social behaviour
- Special interests
- Heightened responses to sensory stimulation
- Difficulty with changes in routine

But, experience has proven that with proper intervention and training, individuals with *ASD* can work in a variety of businesses and industries

The Goal

- Individuals with ASD should have the same rights and entitlements enjoyed by the rest of society
- Employment enables adults with and without disabilities to earn wages they can use to support themselves and pursue their interests
- Employment provides a forum that promotes personal dignity, improves quality of life and cognitive performance
- **Economic advantages :**
 - Less reliance on government funds and more contribution to taxes
 - Decreased cost of community supports with less reliance on day programs and activities
 - Wages provide the means to pay bills
 - Health benefits cover the costs of medical concerns

4 Models

1. Supported employment model
2. Business partnership models
3. Self employment model
4. Our model

1. Supported employment model

- Helping to place and retain individuals with ASD in competitive employment
- Provide support to :
 - completing pre-employment activities
 - adjusting to new job routines
 - skill acquisition on job duties
 - communication and social interactions with work place personnel

1. Supported employment model

Strategies for success : 6 major components

- A. Job Seeker Profile and Assessment
- B. Job placement
- C. Supervisors and co-workers
- D. On the job Training and Support
- E. Work place modifications
- F. Long Term Support / Job Retention

1. Supported employment model

A. Job Seeker Profile and Assessment

ASWI : Asperger Syndrome Workplace Interview

© Arne Svendsrud and Kari Steindal

Interview guide containing **142 items**. Items refer to challenging situations and conditions in working life. The aim is to describe the challenges to find ways of dealing with them or taking them into account in a job context. The employment counsellor goes through the items with the candidate.

1. Supported employment model

A. Job Seeker Profile and Assessment

- Simple tool for professionals such as employment counsellors, job coaches, therapists and educational professionals
- NOT a test or a diagnostic instrument but a systematic review containing items that reflect central aspects of working life that have been identified as potential problems for those with ASD.

The aim is to grade the level of functioning on each item and propose solutions by choosing employment that is compatible with the challenges, helping the person to develop coping strategies or proposing adaptation of conditions in the workplace.

Category 1

Work environment

Joint assessment

Development potential/what should be present/avoided/adapted

5. Very good, an advantage in a work situation
4. Doesn't need follow-up/change/adaptation for you to be able to do the job
3. May need some follow-up/change/adaptation for you to be able to do the job
2. Needs follow-up/change/adaptation for you to be able to do the job, or certain conditions/requirements should be avoided
1. Needs extensive follow-up/change/adaptation for you to be able to do the job, certain conditions/requirements should be avoided

9. Working with 11–25 people	5 4 3 2 1
10. Working with 26–50 people	5 4 3 2 1
11. Working with users/the public	5 4 3 2 1
12. Working with children	5 4 3 2 1
13. Working with the elderly	5 4 3 2 1
14. Working with a PC and similar	5 4 3 2 1

Category 2

Stress factors	Joint assessment	Development potential/what should be present/avoided/adapted
20. Able to achieve control and overview of a situation	5 4 3 2 1	
21. Able to tolerate time pressure	5 4 3 2 1	
22. Able to tolerate lack of overview and uncertainty about future events	5 4 3 2 1	
23. Able to tolerate new surroundings and tasks	5 4 3 2 1	
24. Able to tolerate unpredictable situations (what, when, how, why, with whom)	5 4 3 2 1	
25. Able to tolerate a break in routine	5 4 3 2 1	
26. Able to tolerate surprises	5 4 3 2 1	
27. Able to tolerate unpredictable waiting and breaks	5 4 3 2 1	
28. Able to tolerate unclear criteria, e.g. about when a task is completed	5 4 3 2 1	
29. Able to tolerate not being able to complete a task	5 4 3 2 1	
30. Able to tolerate failure or making a mistake	5 4 3 2 1	
31. Able to tolerate tasks that are too difficult	5 4 3 2 1	

Category 3

Personal presentation	Joint assessment	Development potential/what should be present/avoided/adapted
55. Appropriate clothing and shoes	5 4 3 2 1	
56. General personal hygiene	5 4 3 2 1	
57. Reasonably cared-for hair, nails and teeth	5 4 3 2 1	
58. Unusual behaviour	5 4 3 2 1	
59. Making unusual sounds, remarks or similar	5 4 3 2 1	
60. Talking in too loud a voice	5 4 3 2 1	
61. Talking in too soft a voice	5 4 3 2 1	
62. Talking with a conspicuous tone or pitch	5 4 3 2 1	
Other items related to personal presentation		
_____	5 4 3 2 1	
_____	5 4 3 2 1	

Category 4

Social style	Joint assessment	Development potential/what should be present/avoided/adapted
63. Greeting style	5 4 3 2 1	
64. Shaking hands	5 4 3 2 1	
65. General manner	5 4 3 2 1	
66. Table manners and behaviour during breaks	5 4 3 2 1	
67. Staring too intensely	5 4 3 2 1	
68. Avoiding looking at your dialogue partner	5 4 3 2 1	
69. Standing too close to your dialogue partner	5 4 3 2 1	
70. Standing too far from your dialogue partner	5 4 3 2 1	
71. Appropriate touching of other people	5 4 3 2 1	
72. Understanding of social situations and other people	5 4 3 2 1	
73. Obeying social rules	5 4 3 2 1	
74. Interpreting social rules and standards too literally	5 4 3 2 1	
75. Engagement and participation in others' interests and activities	5 4 3 2 1	

Category 5

Communication	Joint assessment	Development potential/what should be present/avoided/adapted
87. Reading non-verbal signs: glances, expressions, gestures, body language	5 4 3 2 1	
88. Meeting others' eyes in a natural manner in social interaction	5 4 3 2 1	
89. Responding to others	5 4 3 2 1	
90. Having listening skills	5 4 3 2 1	
91. Understanding humour	5 4 3 2 1	
92. Initiating conversations	5 4 3 2 1	
93. Seeing the point of smalltalk	5 4 3 2 1	
94. Coping with dialogue and taking turns	5 4 3 2 1	
95. Able to listen and read facial expressions at the same time	5 4 3 2 1	
96. Able to give or obtain information while joking or being sociable	5 4 3 2 1	
97. Able to participate in group discussions, e.g. at a meeting with several people	5 4 3 2 1	
98. Able to choose appropriate subjects in a dialogue	5 4 3 2 1	

Category 6

Organisation and problem-solving	Joint assessment	Development potential/what should be present/avoided/adapted
108. Able to use your judgment	5 4 3 2 1	
109. Able to differentiate between important and unimportant	5 4 3 2 1	
110. Getting caught up in unimportant subjects and details	5 4 3 2 1	
111. Able to grasp essential elements of information and situations	5 4 3 2 1	
112. Black–white thinking about right and wrong	5 4 3 2 1	
113. Able to solve problems independently	5 4 3 2 1	
114. Interpreting agreements too literally	5 4 3 2 1	
115. Understanding verbal instructions	5 4 3 2 1	
116. Understanding practical instructions	5 4 3 2 1	
117. Focusing on the task	5 4 3 2 1	
118. Memory	5 4 3 2 1	
119. Able to take the initiative	5 4 3 2 1	
120. Able to organise work	5 4 3 2 1	

1. Supported employment model

B. Job placement

An appropriate job :

- Individualized and based on the person's strengths and interests
- Predictable and can be adapted to a schedule
- Work tasks are clearly defined and in areas with minimal distractions
- Should require minimal social skills
- Allow adequate time for learning
- Avoid excessive sensory stimulation

1. Supported employment model

C. Supervisors and co-workers

Employment retention requires flexibility and tolerance from individuals who supervise, interact, or collaborate with the person with ASD.

- Modifications to job tasks or to the work environment
- Adjustments to communication exchanges
- Assistance with social interaction
- Need to provide autism awareness training to employers and co-workers.

1. Supported employment model

D. On the job Training and Support


Training will be most beneficial when provided on the actual job site.


➡ learning takes place in the natural setting where real jobs are performed

- Individualized on the job training targets job tasks, acclimation to the job site, and social integration :
 - Behavior management strategies to reduce inappropriate behavior :
 - functional behavior assessment
 - take a short break when upset, and implementation of a picture schedule
 - understands his/her job tasks
 - can complete all job tasks to the satisfaction of his/her supervisor
 - understands workplace rules
 - knows the start time, end time, and break times
 - understands sick leave and vacation policies
 - is aware of emergency procedures
 - knows his or her way to pivotal areas in the building
 - knows how to get to and from work

1. Supported employment model

D. On the job Training and Support

Tools  Enhance the natural support available in the workplace

- Assistive Technology (AT) :
 - computer-based systems, personal computers, video recorders, tablets, iPods, iPads, and other devices.
- Video Based Instruction (VBI) :
 - video self-modeling, and video games to teach social interaction
- Covert Audio Coaching (CAC)
- Alternative AT Supports :
 - Personal digital assistants, smartphones, and other mobile devices  auditory and visual reminders, time management, organizational skills, and daily living tasks.

1. Supported employment model

E. Work place modifications

Environmental stimuli can be distracting and disorienting.

→ Assessments should evaluate noise level, interruptions, crowding, lighting, and space navigation

- Clearly defined work tasks
- Idle time in the workplace may prove to be problematic and also require restructuring

1. Supported employment model

F. Long-term support

Workers often need extended support to avoid later deterioration in work performance which can lead to employment failure

- Natural support : Transfer relationships and support responsibilities to company employees to provide sustained and continual assistance
- External support : Provision of site visits, phone calls to the employer, contact with families and/or residential staff, and retraining when needed. Support staff may also act as a liaison for relevant non-work issues such as residential, social, and medical matters

1. Supported employment model

Key supervision strategies

Job Modification :

- Maintain a consistent schedule and job duties
- Keep the social demands of the job manageable and predictable
- Provide organizers to help structure and keep track of the work
- Add activities to reduce or eliminate unstructured time

Supervision :

- Be direct and specific when giving directions
- Verify that communications are correctly understood
- Assist the employee in learning social rules and interpret social cues encountered in the job
- Explain and help the employee deal with changes on the job

1. Supported employment model

Key supervision strategies

Co-Workers relationships and social interactions

- Encourage co-workers to initiate interactions
- Ensure that one or two co-workers play a role in helping to give job-related suggestions and « keep an eye » on the employee

Support services

- Provide a sense of familiarity and reassurance until the employee and company staff get to know one another
- Transfer relationships and supports to company employees
- Check in and remain on call in case problems arise
- Maintain a liaison role for non work issues that affect the job

1. Supported employment model

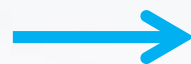
Outcome



- Approximately 68 % permanent employment
- job levels were higher
- work for a greater percentage of the time
- received significantly higher salaries



- Expensive and time-consuming aspects of the necessary close liaison with employers in order to explore appropriate job opportunities and to match these carefully to the skills and abilities of individual clients.



Government funding is necessary

1. Supported employment model

Main example : **Specialistern**

The supervisor's overall assessment of the job performance of the employees was extremely positive. Every employee was considered to be above average, and five employees were described in superlative terms: "wonderful," "excellent," "fantastic," and "one of my best employees." Specific positive work behaviors attributed to the employees included being methodical and conscientious in carrying out job duties; performing work of especially high quality; and being dependable, punctual, and consistent.

2. Business partnership models

- Clear focus on building long term relationships and partnerships with the businesses community
- Some outstanding companies promote the employment of people with ASD

- Ex :
- SAP
 - Microsoft
 - Google
 - Bank of America
 - Hospitals
 -

3. Self employment model

- Lack of competitive employment opportunities
- Have their own business
- Others may see it as a way to showcase talent and get paid for it.

Many examples

The most important :

- Identify each individual's strengths and talents
- Identify support needs while assembling a team to facilitate self-employment
- Where the entrepreneur can lead the way and where support is needed will vary from one person to another and from one situation to another.

4. Our model

Mix between supported employment and normal company

Autisme Sans Limites (Non profit organisation)

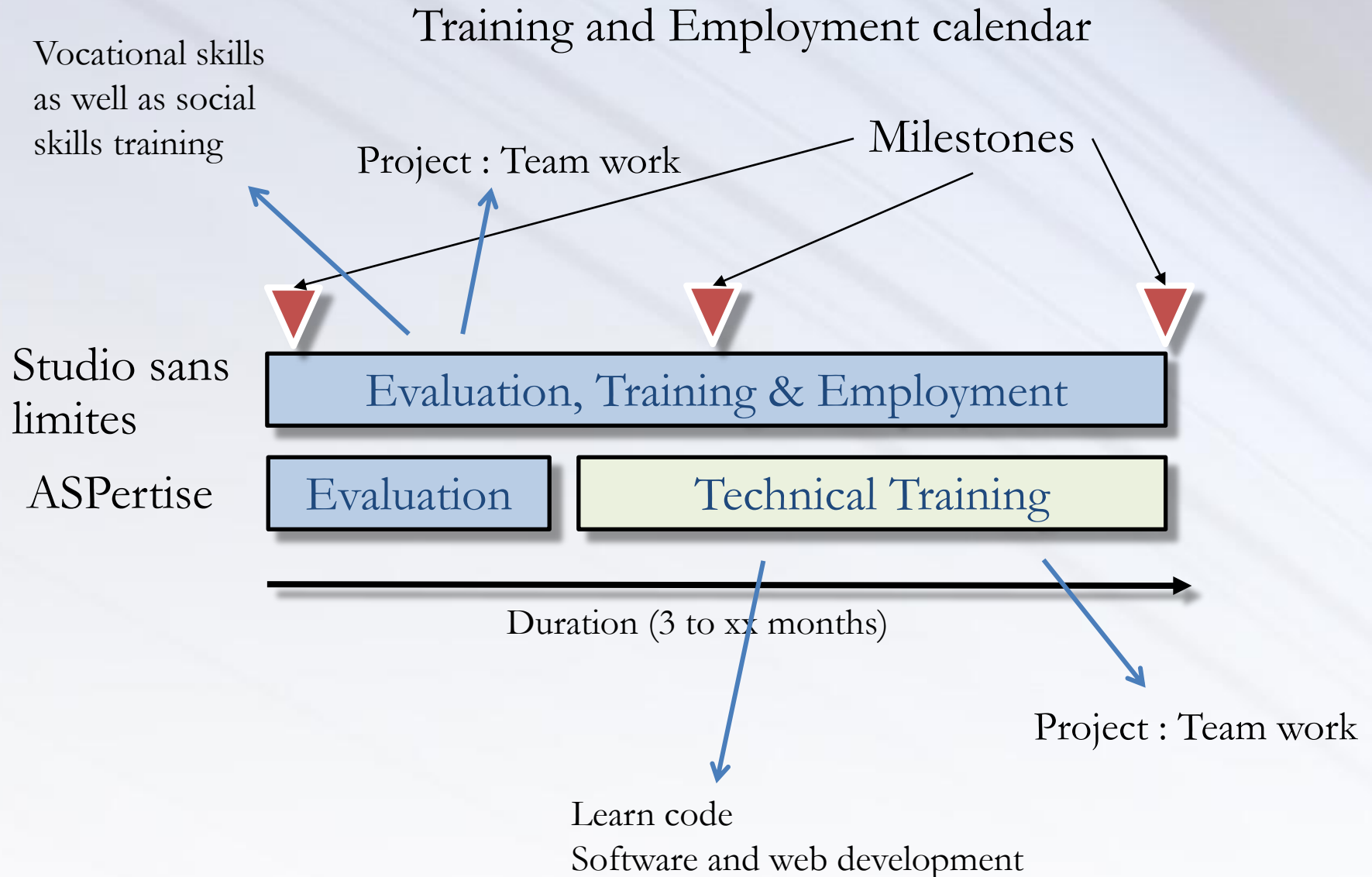


Studio sans limites
Printing company



ASPertise
IT Company

4. Our model



4. Our model

ASL



Find a job

Continue training

Back to school

ASPertise



Internship (1-3 months)



Employee

ASPertise

Unique Cognitive Skills.

A New Approach to Software Development



Web design

Software Development

Big Data

4. Our model

Offices :

- Sound proof offices, lighting conditions, flexible domotic
- Mix of open space and closed office
- Special room where the employee can rest

Other :

- Employee can order their meal if they wish
- Transportation
- Help to find accomodation
- Social abilities group : work in close collaboration with a psychology clinic
- Help for administrative matters
- ...

4. Our model

Other examples

Auticon (Germany) : 25 employees, Informatic, Business intelligence, offices in 5 cities
(<http://auticon.com/>)

Aspiritech (US) : 5 employees, software testing (<http://aspiritech.org/>)

Asperger Informatik (Switzerland) : 10 employees, Informatic and graphic
(<http://www.asperger-ag.ch/unternehmen-dienstleistungen/unternehmen/>)

Business is the answer to chronic ASD unemployment. This is where the jobs are. We must work more closely with business.



Carwashcompany.mp4