Work-focused interventions that promote the labour market participation of young adults with chronic disabling health conditions
A systematic review

Arif Jetha PhD
Associate Scientist
Institute for Work & Health
Speaker Series, Fall 2018
Take home points

• Young adults (18-35 years) living with chronic disabling health conditions experience difficulties entering and advancing within the labour market
• Systematic review of work-focused interventions that promote the employment participation of young adults with disabling health conditions
• Tailored supported employment interventions were effective in preparation and entry into employment
• Few other interventions existed that address the support needs of young adults with chronic disabling health conditions
What is the young adult life phase?

- Spans approximately 18 to 35 years of age
- Transitional period; educational roles to full-time employment
- Employment experiences during this period shape career trajectory; scarring effect

Source: Arnett, 2004; Scarpetta, 2010
Millennials: a generational context

Largest share of the Canadian labour market

- Absence of employment opportunities
- Job mobility to gain knowledge and skills
- Greater preference for jobs with scheduling flexibility, organizational culture or training opportunities

Born 1982 - 2004

- Technological literacy and education
- Less likely to be engaged in full-time and permanent jobs

Source: Twenge and Campbell, 2012; Deloitte, 2016
Job precarity + Millennials

Survey of 1,189 millennials in Hamilton, ON

- 9/10 preferred full-time permanent jobs
- 44% millennials have permanent full-time employment
- 47% working at jobs with some degree of insecurity

Source: Martin and Lewchuk, 2018
Decline in manufacturing jobs
30% GDP 1950 to 10% GDP 2017

Growth of gig work and microtasking

42% of jobs are at risk of automation

Young adults 3x more likely to be affected

Changing nature of work

Source: Statistics Canada, 2018; Lamb and Doyle 2018
Work + Health

- Social determinant of health
- Access to social networks
- Contribute to identity
- Happiness

Risk of mental health condition greater among millennials (63%) than baby boomers (13%)

Millennials with poor/fair mental health
- 39% precarious work
- 13% secure employment

Source: IPSOS, 2017; Martin and Lewchuk, 2018
Millennials face unique social conditions

Millennials are more likely to...

- Facing higher costs of living with less wage growth
- More likely to live at home
- Higher student debt
- Less likely to have retirement savings or collect a pension
- Rising health care costs

Source: Hobbes, 2017; Twenge and Campbell, 2012
Employment and disability in young adulthood

Labour force participation of young adults

- w/out a disability: 61%
- w/ a disability: 44%

Young adults employed w/ a disability:
- Productivity loss
- Denial of a promotion
- Earning less income
- Allocated fewer job responsibilities
- Difficulties talking about their needs and requesting accommodations

Source: Statistics Canada, 2017
New Data! Survey of 1,800 employed adults

- 50% sampled had a disabling health condition
- Compared millennials to Gen X (1961-1981)

Short-term contract

<table>
<thead>
<tr>
<th></th>
<th>Disability</th>
<th>No Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millennials</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Gen X</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Part-time employment

<table>
<thead>
<tr>
<th></th>
<th>Disability</th>
<th>No Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millennials</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Gen X</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Work perceived as 'quite a bit'/'extremely' Stressful

<table>
<thead>
<tr>
<th></th>
<th>Disability</th>
<th>No Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millennials</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>Gen X</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>
What types of workplace supports do young adults with disabling health needs?

- 155 young adults with disabilities
- Average age 26 years
- 68% >1 disability
- >¾ worked in non-standard employment contracts

Source: Jetha et al., 2018
Soft accommodations

- Scheduling modifications
- Self-management support
- Workplace social support
- Informal job modifications
- Training support
- Work-from-home arrangements
- Modified job duties
- Interview support

Hard accommodations

- Accessible workspace
- Assistive technology
- Communication adaptation
- One-on-one support
- Adapted transportation

Health benefits

- Extended health benefits
- Employee assistance plan
### Perceived barriers to accessing workplace supports

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosure</td>
<td>77%</td>
</tr>
<tr>
<td>Accommodation cost</td>
<td>74%</td>
</tr>
<tr>
<td>Non-modifiable duties</td>
<td>68%</td>
</tr>
<tr>
<td>Attitudes towards disabled employees</td>
<td>65%</td>
</tr>
<tr>
<td>Employer awareness</td>
<td>63%</td>
</tr>
<tr>
<td>Non-standard employment</td>
<td>63%</td>
</tr>
<tr>
<td>Enforcement of policies</td>
<td>61%</td>
</tr>
<tr>
<td>Absence of organizational accommodation policies</td>
<td>61%</td>
</tr>
<tr>
<td>Physical workplace environment</td>
<td>53%</td>
</tr>
</tbody>
</table>
Work-focused interventions: address needs and perceived barriers

Work-focused interventions
Explicit intention is to promote employment participation; includes finding and sustaining paid work or enhancing productivity

Previous systematic reviews of general adult samples with disabling health conditions
• Multidimensional work-focused interventions can be effective
• Workplace modifications, health/rehabilitation care, supported job placements and work-related training

Unclear what work-focused interventions would be beneficial to young adults with different disabling health conditions

Source: Cullen, 2018
Work-focused interventions for young adults

A systematic review
Research questions

Q1 What work-focused interventions are most effective in supporting the employment of young adults with chronic disabling health conditions?

Q2 Does the effectiveness of work-focused interventions differ for young adults living with different chronic disabling health conditions?

Q3 Do interventions and their effectiveness differ across phases of the transition into the labour market?
Systematic review

A systematic review is a literature review that answers a research question by:

- Identifying primary studies
- Appraising methodological quality
- Summarizing findings

Develop specific recommendations for decision makers
IWH Systematic Review Steps

1. Develop question
2. Conduct literature search
3. Identify relevant articles
4. Quality appraisal
5. Data extraction
6. Evidence synthesis

Involvement in Dissemination

Source: Institute for Work & Health, 2018
Step 2: Literature search

Population
young adults + chronic disabling conditions

Context
OECD labour market

Intervention
Work-focused intervention

Outcome
Work participation

Studies retrieved in search
Step 3: Identify relevant studies through title/abstract and full-text reviews

Inclusion
- Work-focused
- Young adults
- Comparison group
- Work participation

Exclusion
- Clinical interventions
- Focus on adults
- Focus on adolescents
- Non-work outcomes
## Steps 4-6: Quality assessment and evidence synthesis

<table>
<thead>
<tr>
<th>Level of Evidence</th>
<th>Minimum Quality</th>
<th>Minimum Quantity</th>
<th>Consistency</th>
<th>Strength of Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>High (H)</td>
<td>3</td>
<td>3H studies agree; If &gt;3 studies, ¾ of the M + H agree</td>
<td>Recommendations</td>
</tr>
<tr>
<td>Moderate</td>
<td>Medium (M)</td>
<td>2H or 2M + 1H</td>
<td>2H studies agree or 2M + 1H agree; If &gt;3 studies, &gt; ⅔ of the M + H agree</td>
<td>Practice Considerations</td>
</tr>
<tr>
<td>Limited</td>
<td>Medium (M)</td>
<td>1H or 2M or 1M + 1H</td>
<td>1 H or 2 (M and/or H) studies agree; If &gt;2 studies, &gt; ½ of the M + H agree</td>
<td>Not enough evidence to make recommendations or practice considerations</td>
</tr>
<tr>
<td>Mixed</td>
<td>Medium (M)</td>
<td>2</td>
<td>Findings from M + H are contradictory</td>
<td></td>
</tr>
<tr>
<td>Insufficient</td>
<td></td>
<td></td>
<td>No high quality studies. Only medium quality studies that do not meet the above criteria</td>
<td></td>
</tr>
</tbody>
</table>

*High = >85% in quality assessment; Medium = 50-85% in quality assessment

---

**Quality appraisal tool**
- Study design/objectives
- Recruitment
- Intervention
- Outcome and analysis

---

**Source:** Slavin, 1986
Results
Review Flowchart

Step 2: Conduct literature search
- Medline (n=4022)
- EMBASE (n=3628)
- PsycInfo (n=1544)
- Other (n=0)
Retrieved (N=9194)

3379 duplicates removed
5185 screened out
615 screened out

Step 3: Identify relevant studies
Abstract and title relevance screen (N=5815)

Step 4: Quality appraisal of relevant studies
Quality appraisal of relevant studies (N=15)

5 appraised as low quality

Step 5: Data extraction
Data extracted from relevant studies of sufficient quality (N=10)

Step 6: Evidence synthesis
3 relevant high and 7 medium quality studies
Location of work-focused intervention

- United States: 6
- Australia: 2
- United Kingdom: 1
- Japan: 1
### Duration of observation

<table>
<thead>
<tr>
<th>Duration</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;24 months</td>
<td>1</td>
</tr>
<tr>
<td>13-24 months</td>
<td>2</td>
</tr>
<tr>
<td>7-12 months</td>
<td>6</td>
</tr>
<tr>
<td>0-6 months</td>
<td>1</td>
</tr>
</tbody>
</table>
Study design

- Randomized trial: 5
- Non-randomized trial: 2
- Other: 3
Disability type

- All disability: 1
- Intellectual/learning: 3
- Mental health: 6
Phase of employment transition

- Preparation: 10
- Entry: 9
- Sustaining employment: 0
- Career advancement: 0
Intervention outcomes

- Hours worked/week: 2
- Income: 2
- Job tenure: 2
- Employment: 4
- Competitive employment: 8

Meaningful integrated employment that is consistent with a person’s career interests and skills, and where wages are at the market rate.
Tailored supported employment

n = 8

- Workplace placement
- Tailored vocational coaching
- Multidisciplinary support team
- Workplace disability awareness
- Individualized placement and support

Tailored supported employment +

disease-specific workplace intervention

n = 2

Tailored supported employment +
self-disclosure training

n = 1
Youth Transition Demonstration enhanced employment service

n = 1

• Individualized work-based experiences, empowerment building, family support, connection to a range of service providers (e.g., health care, assistive devices, transportation)

• Policy intervention; retain income support while engaging in the labour market

Technology-based job interview training

n = 1

• Virtual reality simulation of a job interview with a virtual organizational human resource representative

• Mimic real-life interview to develop comfort and confidence in the interview process
<table>
<thead>
<tr>
<th>Intervention</th>
<th>Work outcome</th>
<th>Level of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tailored supported employment</td>
<td>Competitive employment</td>
<td><strong>Strong (+)</strong> 3 high quality and 4 medium quality</td>
</tr>
<tr>
<td>Tailored supported employment</td>
<td>Employment</td>
<td><strong>Moderate (+)</strong> 2 high quality and 1 medium quality</td>
</tr>
</tbody>
</table>

**Q1** What work-focused policies and programs are most effective?

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Work outcome</th>
<th>Level of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health</td>
<td>Tailored supported employment</td>
<td><strong>Moderate (+)</strong> 2 high quality and 3 medium quality</td>
</tr>
<tr>
<td>Intellectual and learning disability</td>
<td>Tailored supported employment</td>
<td>Competitive employment</td>
</tr>
</tbody>
</table>

**Q2** Does the effectiveness of work-focused policies and programs vary for different disabling conditions?
Q3. Do interventions and their effectiveness differ across phases of the transition into the labour market?

No evidence to answer the research question
Discussion
Practice messages

For young adults with disabling health conditions...

- Tailored supported employment interventions are recommended
- Particularly effective for young adults with mental health conditions

Insufficient evidence

- Interventions to address needs of different disabling health conditions
- Interventions at other phases of the transition into employment
Reflections on tailored supported employment

**Multidimensional nature;** access competitive employment, health-care management, work environment intervention

- Address psychosocial and physical workplace barriers

Research is needed to examine the efficacy of tailored supported employment…

- Longer-term studies to examine if tailored supported employment interventions are effective in enhancing productivity and sustained work

- Tailored supported employment along with disability-specific interventions and/or disclosure training can potentially address barriers to accessing workplace supports

*Source:* Drake and Bond, 2018; Bond and Drake, 2014
## What’s missing in the literature?

<table>
<thead>
<tr>
<th>Policy level interventions</th>
<th>Use of policy tools as a population-level intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Youth Transition Demonstration; income support waivers</td>
</tr>
<tr>
<td>At-work experiences and career advancement</td>
<td>Sustained employment</td>
</tr>
<tr>
<td></td>
<td>Productivity</td>
</tr>
<tr>
<td></td>
<td>Career growth</td>
</tr>
<tr>
<td>Changing nature of work</td>
<td>Precarious labour market</td>
</tr>
<tr>
<td></td>
<td>Knowledge-based economy</td>
</tr>
<tr>
<td>Other commonly reported chronic conditions</td>
<td>Juvenile arthritis, diabetes</td>
</tr>
</tbody>
</table>
What is missing (continued)?

| Addressing workplace support needs | • Extended health benefits  
| | • Soft accommodations |
| Addressing perceived barriers | • Communication at work  
| | • Employer perceptions regarding the cost/feasibility of accommodations |
| Canadian-focused interventions |
Conclusions

Young adults with chronic disabling conditions are a vulnerable labour market subgroup

Tailored supported employment interventions are recommended

We know little about the interventions that foster the employment

Research is needed
• Development of interventions with wide reach
• Address at-work experiences and needs
• Changing labour market and how it influences early work experiences
Research + Stakeholder involvement

Research team

Arif Jetha (IWH)
Rob Shaw (UBC) Co-PI
Quenby Mahood (IWH)
Monique Gignac (IWH)
Adrienne Sinden (McMaster U)
Mary Ann McColl (Queens U)
Kathleen Martin Ginis (UBC)

Stakeholders

Canadian Disability Policy Alliance
March of Dimes
Neil Squire Society
Canadian Canadian Council on Rehabilitation and Work
Guelph University Disability Services
Acknowledgements

Project funding

The Institute for Work & Health operates with the support of the Province of Ontario. The views expressed in this document are those of the authors and do not necessarily reflect those of the Province of Ontario.

Systematic review methodological support
Emma Irvin, Kim Cullen and Dwayne Van Eerd

www.iwh.on.ca
Works cited


15. Bond GR, Drake RE. Making the case for IPS supported employment. Administration and policy in mental health and mental health services research 2014;41(1):69-73


Keep up on research and evidence-based practices from IWH

AJetha@iwh.on.ca  @ArifJetha

Sign up online for our monthly e-alerts, newsletters, event notifications and more: www.iwh.on.ca/e-alerts

Follow @iwhresearch on Twitter: www.twitter.com/iwhresearch

Connect with us on LinkedIn: www.linkedin.com/company/institute-for-work-and-health

Subscribe to our YouTube channel: www.youtube.com/iwhresearch

This document/slide is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License: http://creativecommons.org/licenses/by-nc-nd/4.0/.