

The 2006 Participation Activity Limitation Survey (PALS)

Susan Stobert & Andrew MacKenzie

2008

14th Annual North American Collaborating Center Conference on ICF
14^e conférence annuelle du North American Collaborating Center
sur la Classification internationale du fonctionnement (CIF)



EVALUATING SOCIAL
PARTICIPATION:
Applications of the ICF and ICF-CY

ÉVALUATION DE LA
PARTICIPATION SOCIALE :
applications de la CIF et de
la CIF-Enfants et Adolescents

Overview of Presentation

- **Overview of PALS**
 - Conceptual framework, survey design & methodology
- **Small area estimation**
 - Modelling sub-provincial disability rates
- **Latest results**
 - Overview of the 2006 Canadian population, special education for children, assistive technology, employment
- **Labour market outcomes for people with disabilities**
 - Factors affecting success

Information is the foundation for action on disability issues

- **Governments require information to guide disability policy**
- **The experience of Canadians with disabilities as captured in national surveys provides essential information**
 - For tracking progress
 - For accountability and reporting to Canadians
 - For policy and program development
- **The Participation and Activity Limitation Survey (PALS) is Canada's principal national survey focusing on persons with disabilities.**

The relationship between PALS and ICF

- PALS follows ICF as a model, but not 100%
 - Body functions and structures should manifest as activity limitations and participation restrictions
 - Over 1,000 codes, limited patience of respondent
- Defining the PALS universe
 - Select elements to reflect most common disabilities
 - Pain & memory not included for kids 0-14, chronic conditions and developmental delay (0-4 only) added

Hearing

Seeing

Communicating

Mobility

Agility

Pain

Learning

Memory

Developmental

Emotional / Psychological

Other

PALS 2006 Sample Design

- Stratified random sample post-censal design
 - Census disability filter questions
- Target population
 - children (under 15) and adults (15 years and over) living in households in the 10 provinces and the territories who reported an activity limitation in the census
- Sample of 39,000 adults, 9,000 children from the YES sample in the 2006 Census
- Response rate of 75.0%
- Weights profiled using most recent Census
 - Post-stratified for non-response

Survey content

- Type of disability
- Assistance and support –
 - Aids and assistive devices – use and unmet needs
 - Help received – use and unmet needs
 - Medications – use, unmet needs, out of pocket costs
 - Housing modifications – use and unmet needs
 - Education modifications – in the past five years
- Employment
 - Employed, unemployed, retired, not in labour force
 - Employment modifications – use and unmet needs
 - Potential for the return to the workplace
 - Discrimination

Survey content - continued

- Participation and life satisfaction
 - Unpaid work
 - Leisure activities
 - Internet use
 - Social contacts
 - Stress
 - Life satisfaction
 - Transportation

Stratification

- Six age groups:
 - 0-14
 - 15-24
 - 25-44
 - 45-64
 - 65-74
 - 75 and over
- Severity of disability
- Province and territory
 - No sub-provincial estimates

Release of PALS data

- Disability rates: December 3, 2007
- Education experiences of children with disabilities: May 2008
- Aids and assistive devices: June 2008
- Employment : July 2008
- Income: September 2008
- The impact on the family of having a child with a disability: September 2008
- Final files in the Research Data Centres: September 2008
- Public Use Micro-data file: Spring 2009



Small area estimation

Why do we need SAE's?

- PALS provides data only at the level of province and territory
- But there is a need by provincial and municipal authorities for disability rates and counts at a sub-provincial level
- There are drawbacks to using Census data for the filter questions
 - False positive rates vary strongly by age group

SAE Method

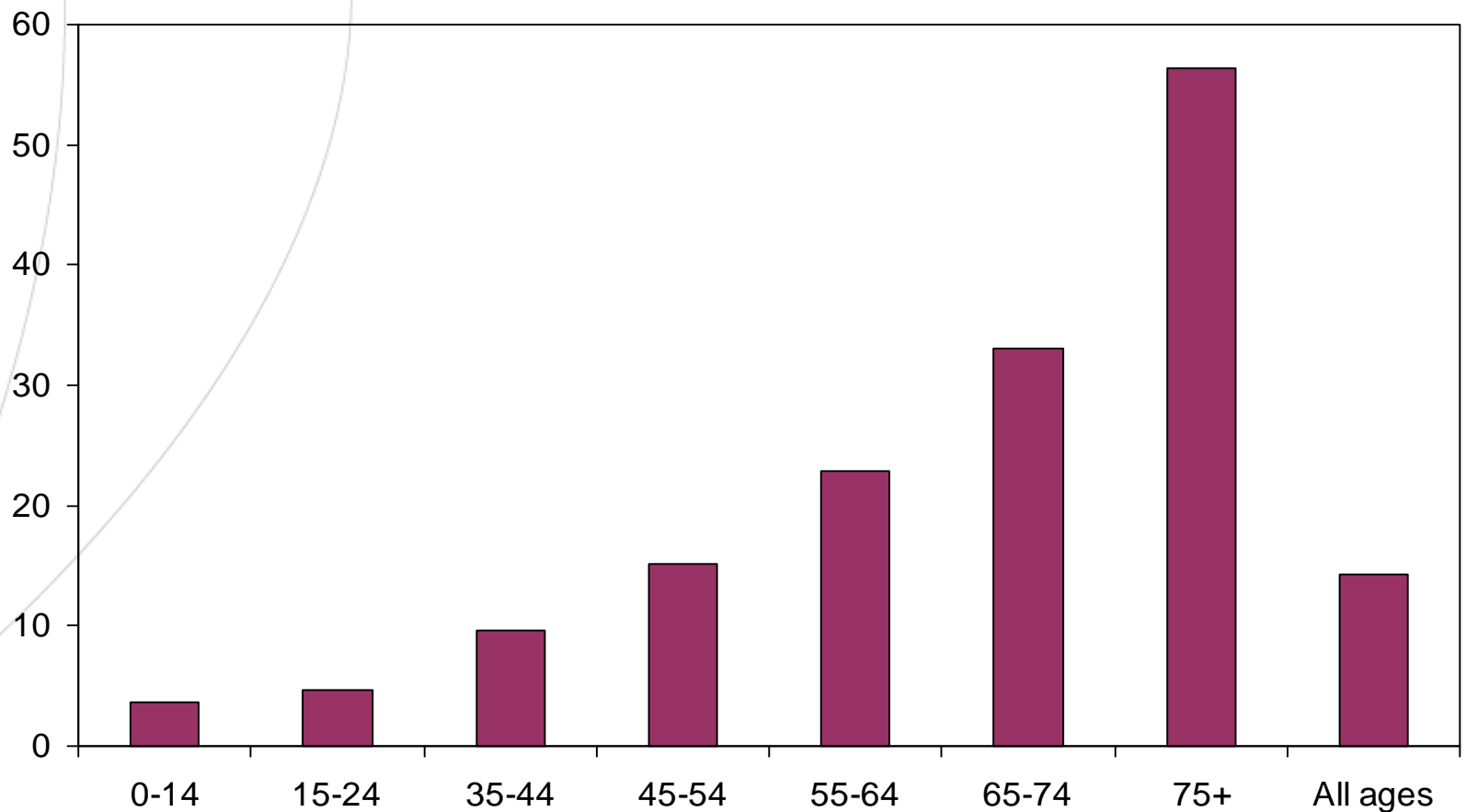
- Log-linear unmatched model
 - Direct measurements for small areas from the PALS survey
 - Census information is used in the linking model to improve the estimates
 - The prediction variables were selected using weighted least squares regression analysis
 - Include p_age25to34, p_age75plus, p_source_govt
- Significant reduction in the CV's
- Disability rates for 119 health regions and 116 municipalities benchmarked to PALS
- To be released this fall



Results from the 2006 PALS

General population statistics

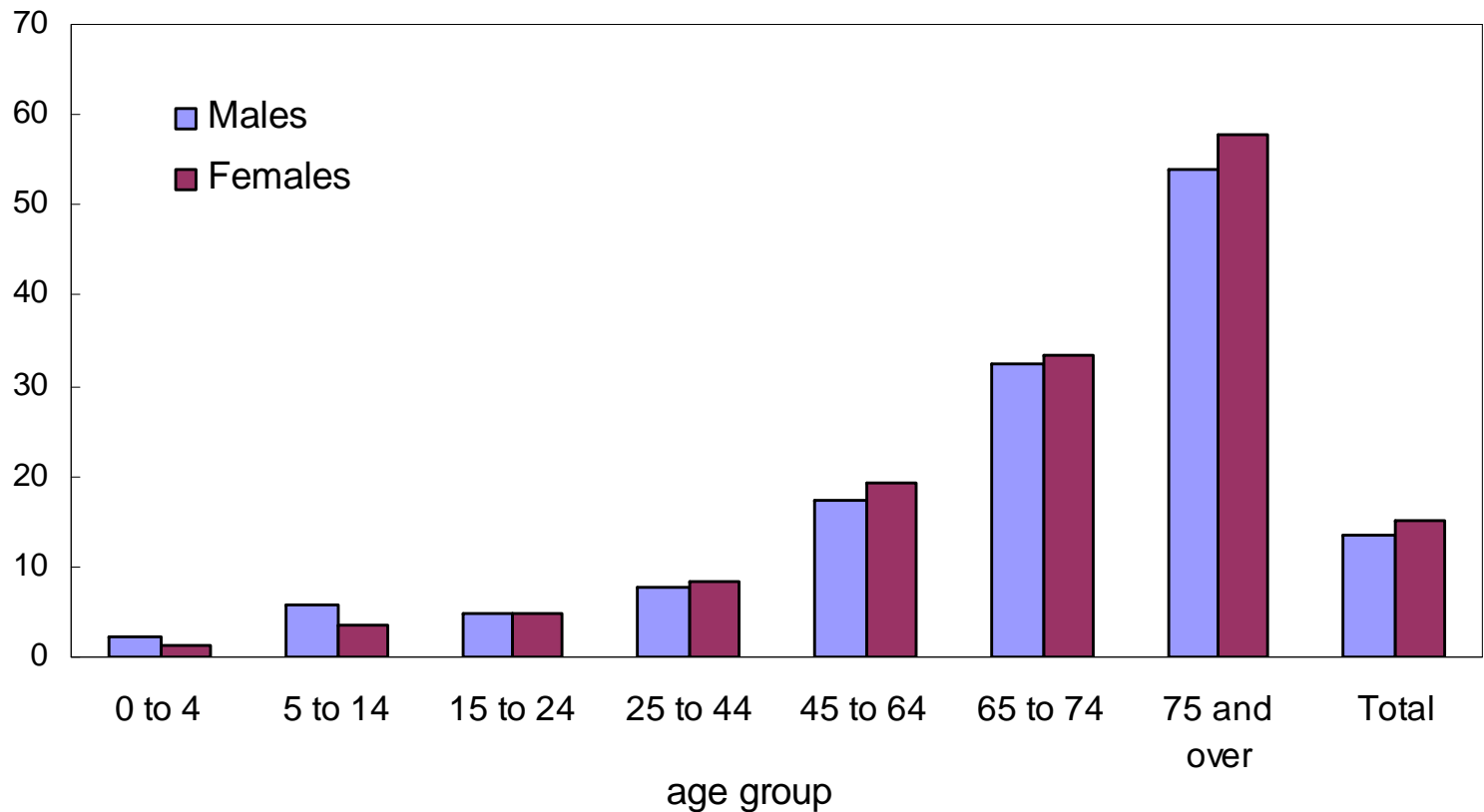
Activity Limitations are More Prevalent Among Older Canadians, PALS 2006



Source: Statistics Canada, Participation Activity Limitation Survey, 2006

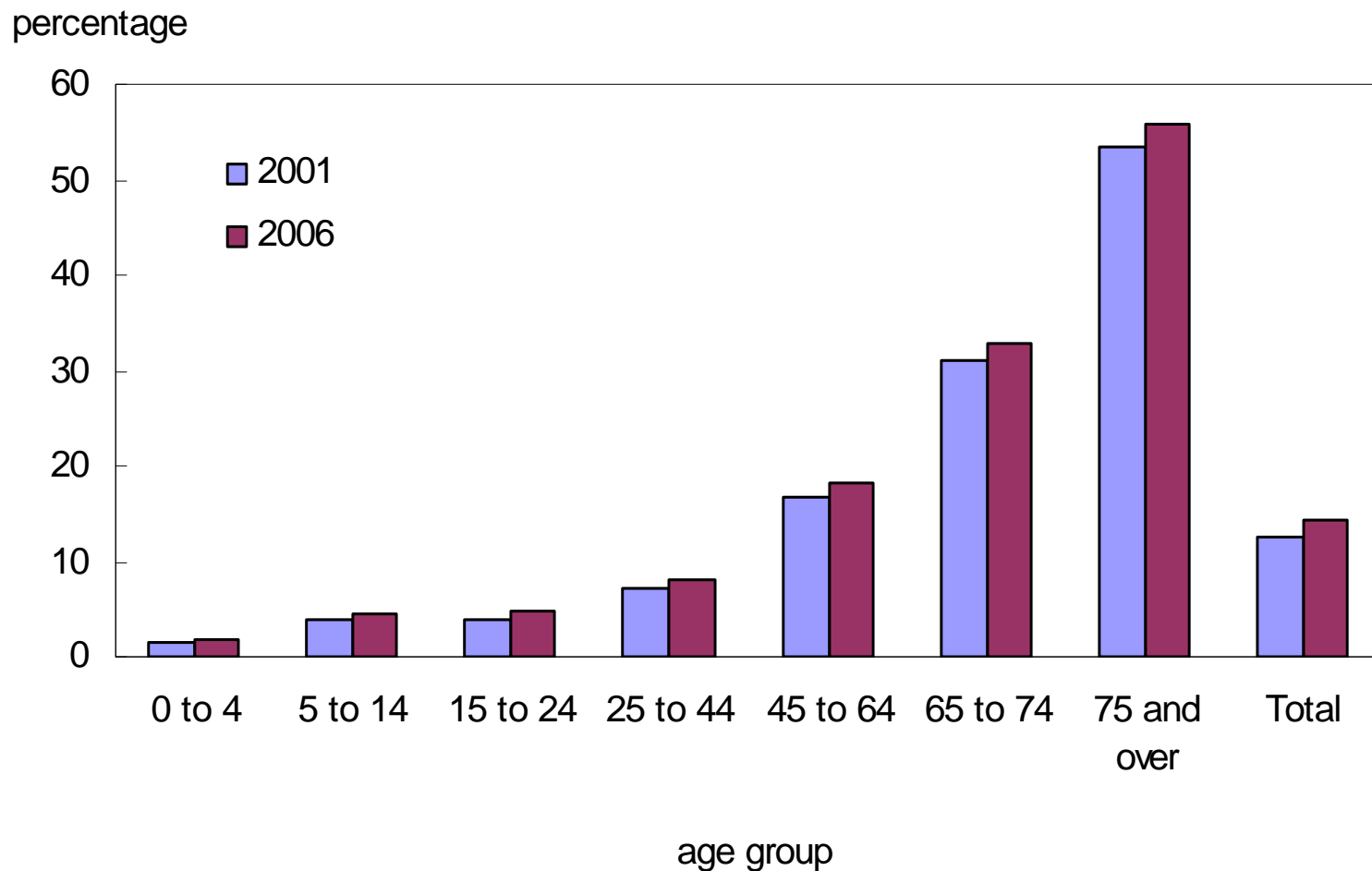
Adult Women Report Higher Disability Rates than Men, PALS 2006

percentage



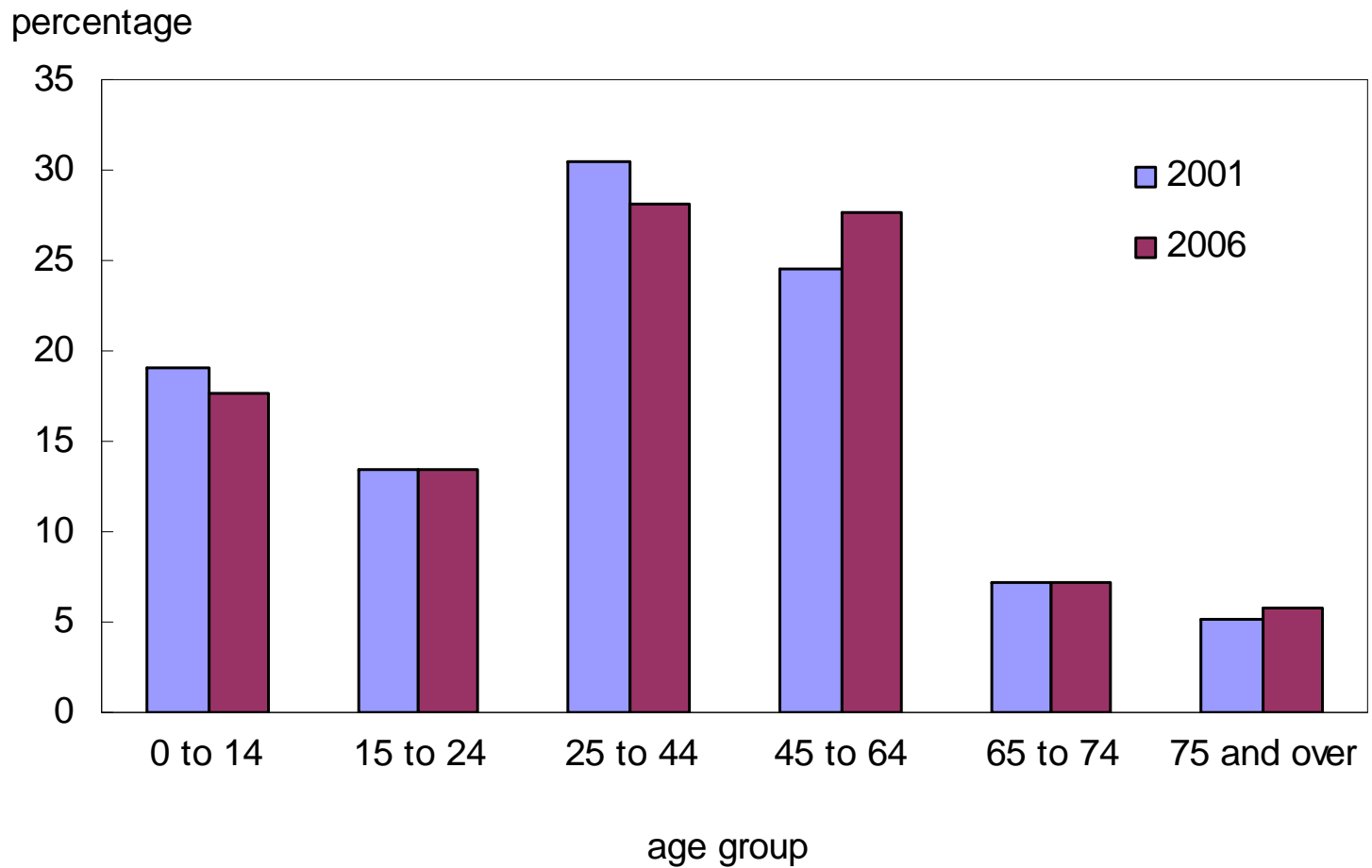
Source: Statistics Canada, Participation Activity Limitation Survey, 2006

Growth in Disability Rates between 2001 and 2006



Source: Statistics Canada, Participation Activity Limitation Survey, 2001 & 2006

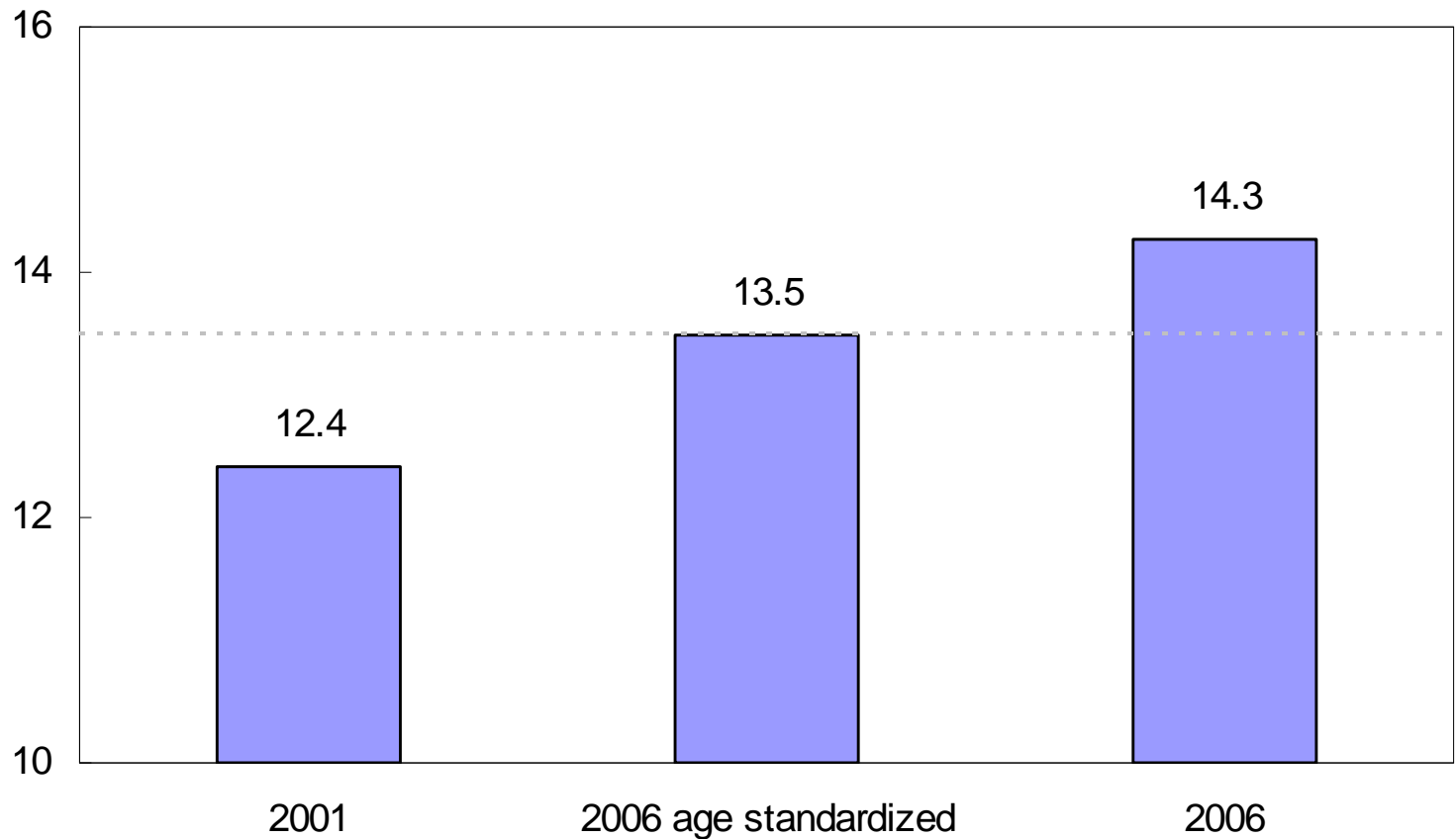
Canadian Population Continues to Age



Source: Statistics Canada, Census of Population, 2001 & 2006

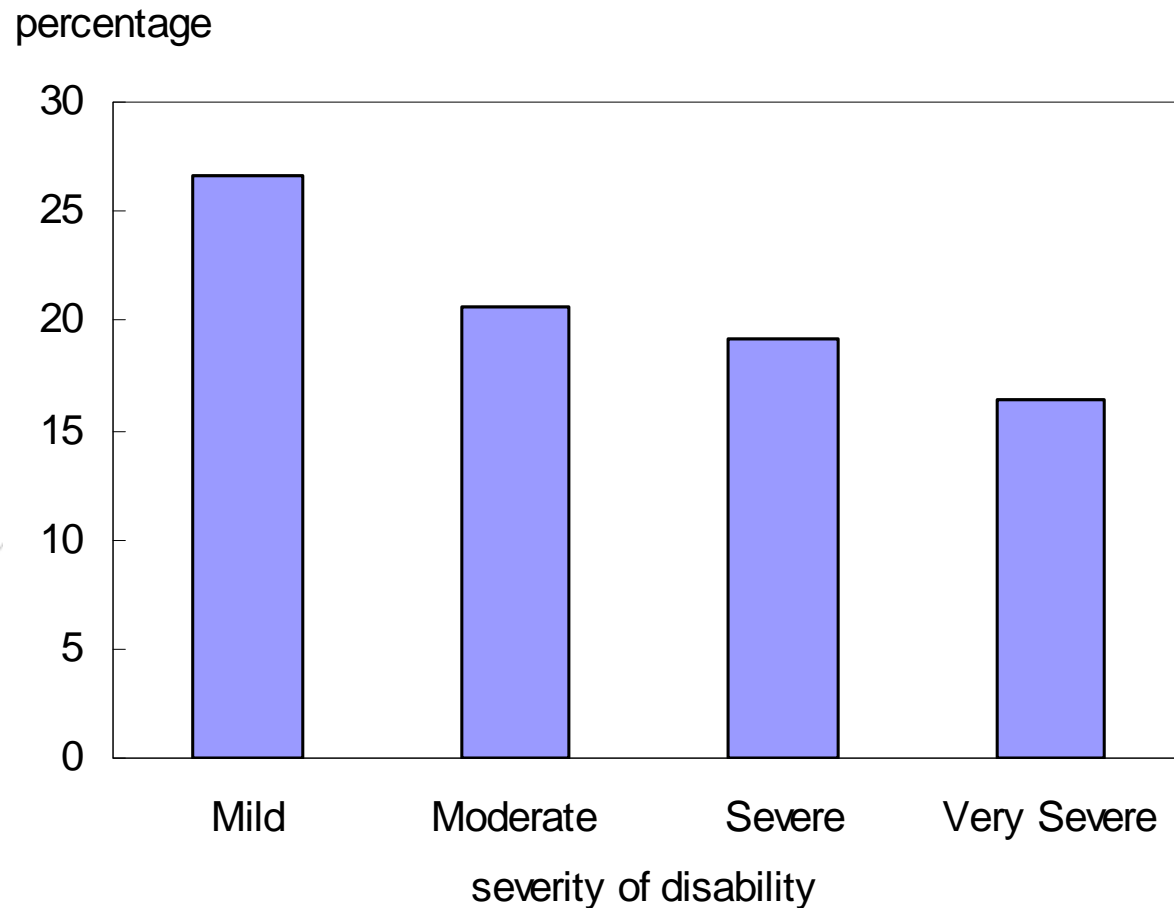
Age Standardised Disability Rate

percentage



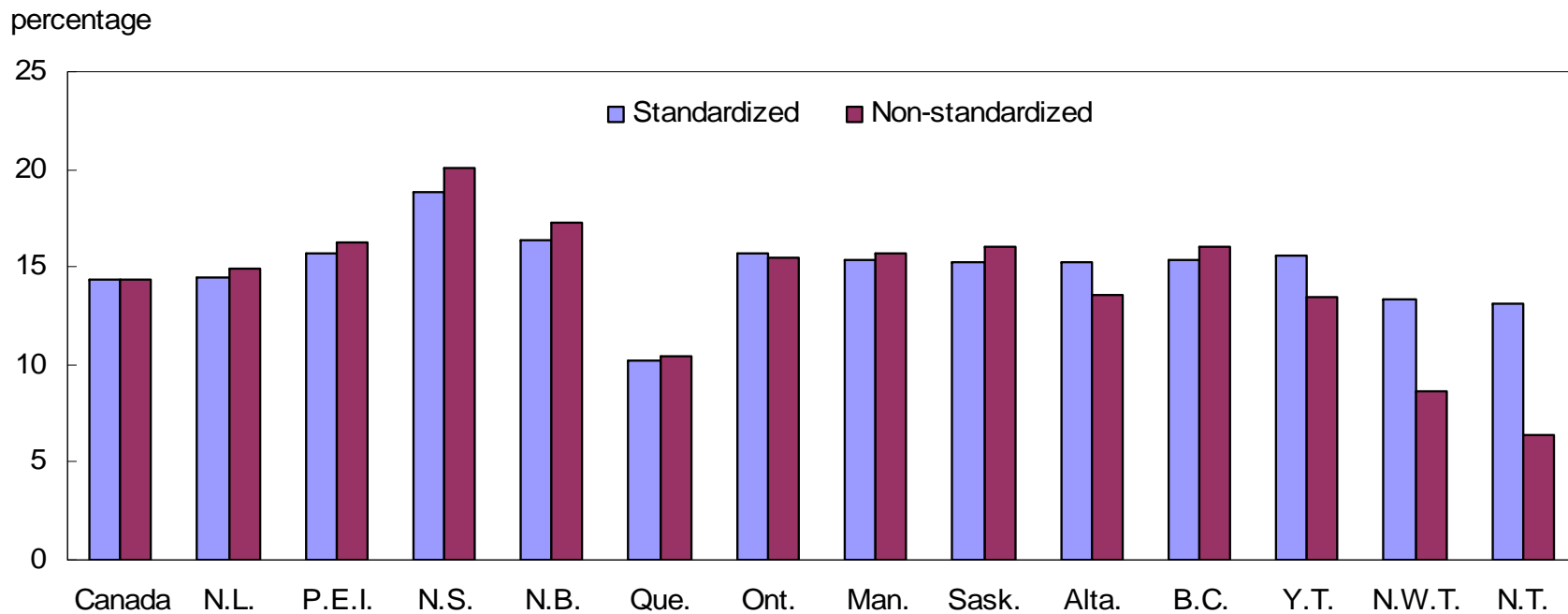
Source: Statistics Canada, Participation Activity Limitation Survey, 2001 & 2006

The Number of Persons Reporting a Mild Disability Increased Most



Source: Statistics Canada, Participation Activity Limitation Survey, 2001 & 2006

Provincial and Territorial Age Distributions

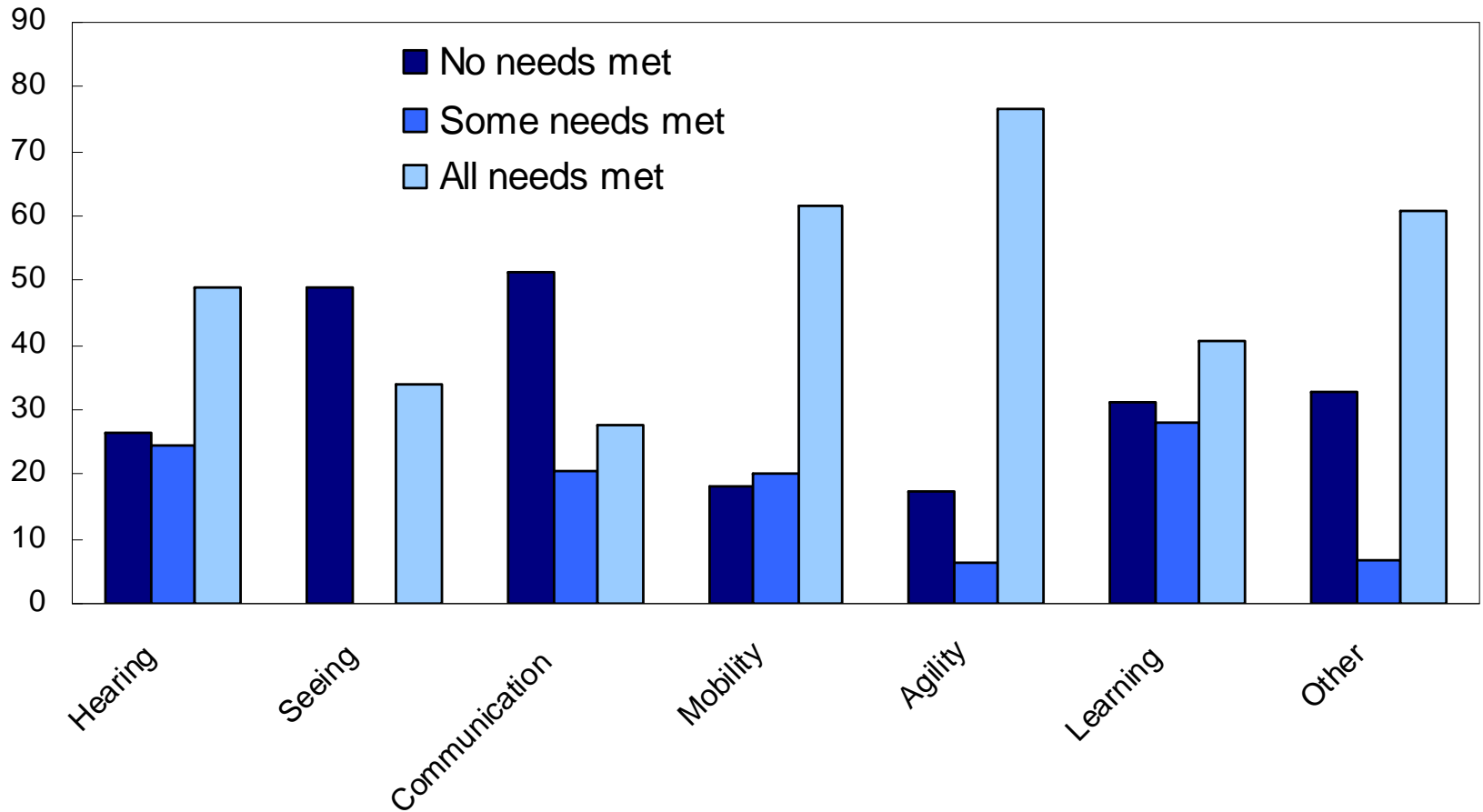




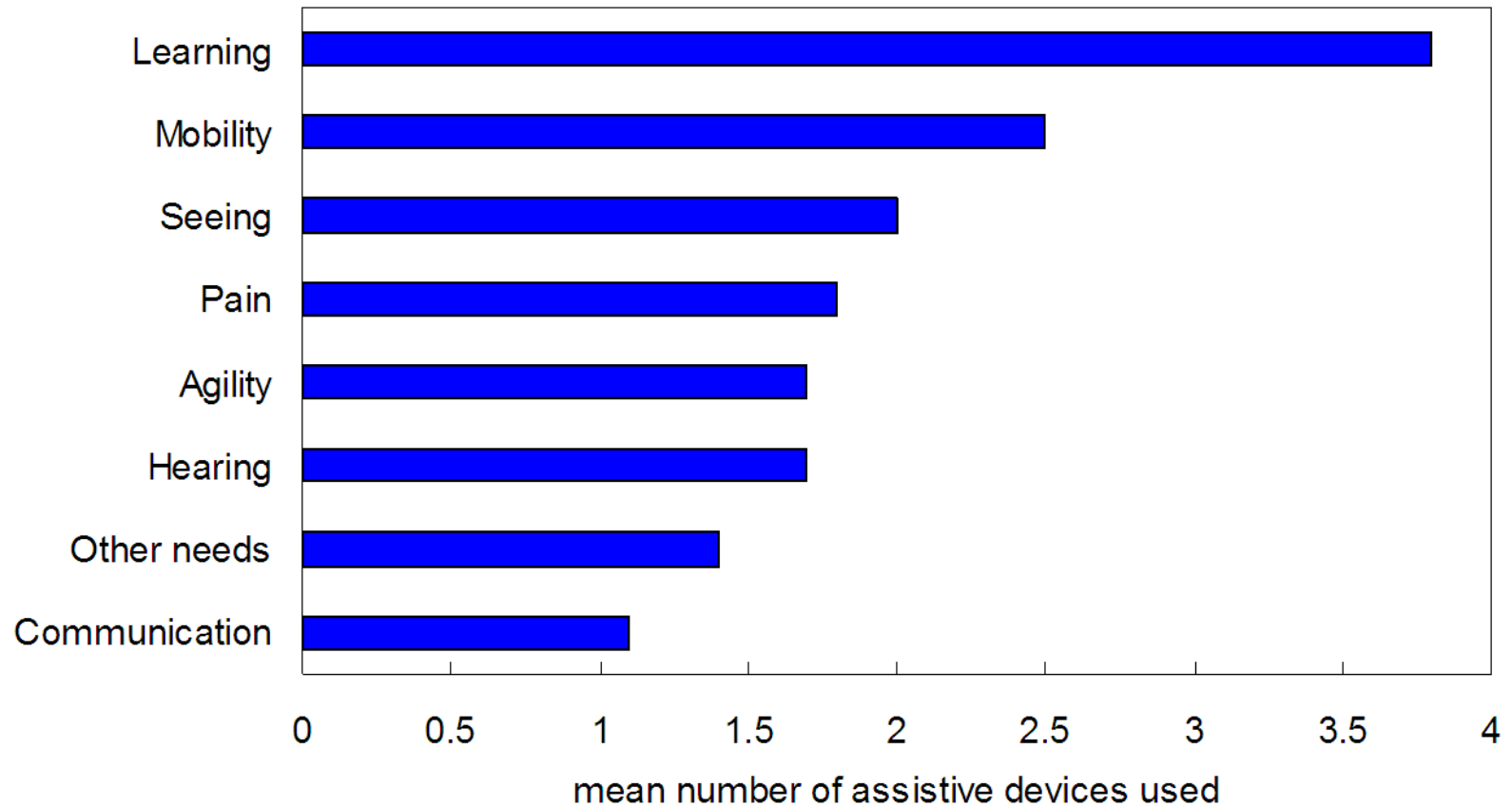
Results from the 2006 PALS

Assistive technology

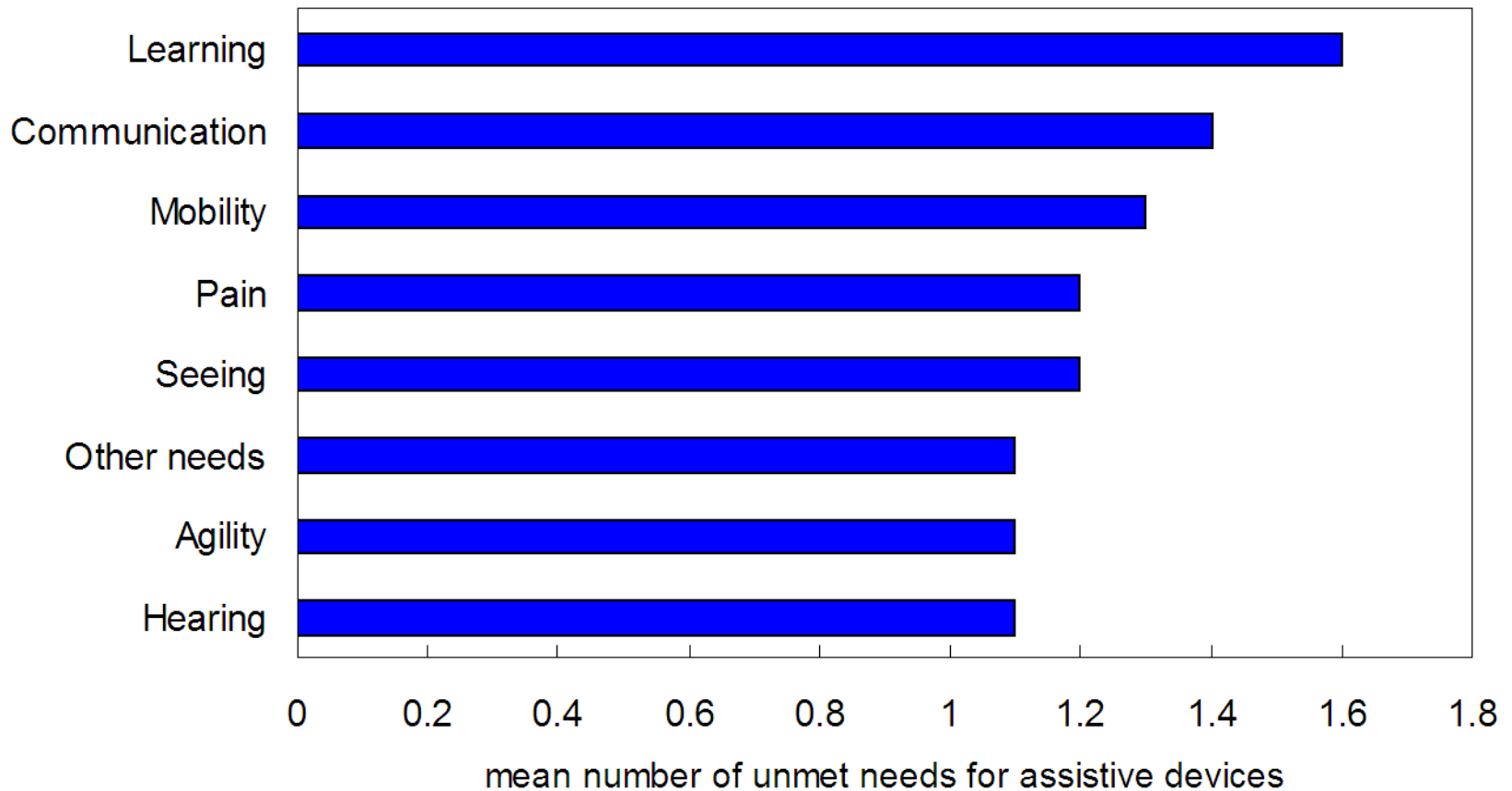
Need for assistive technology by disability type



Assistive technology use



Needs for assistive technology by disability type

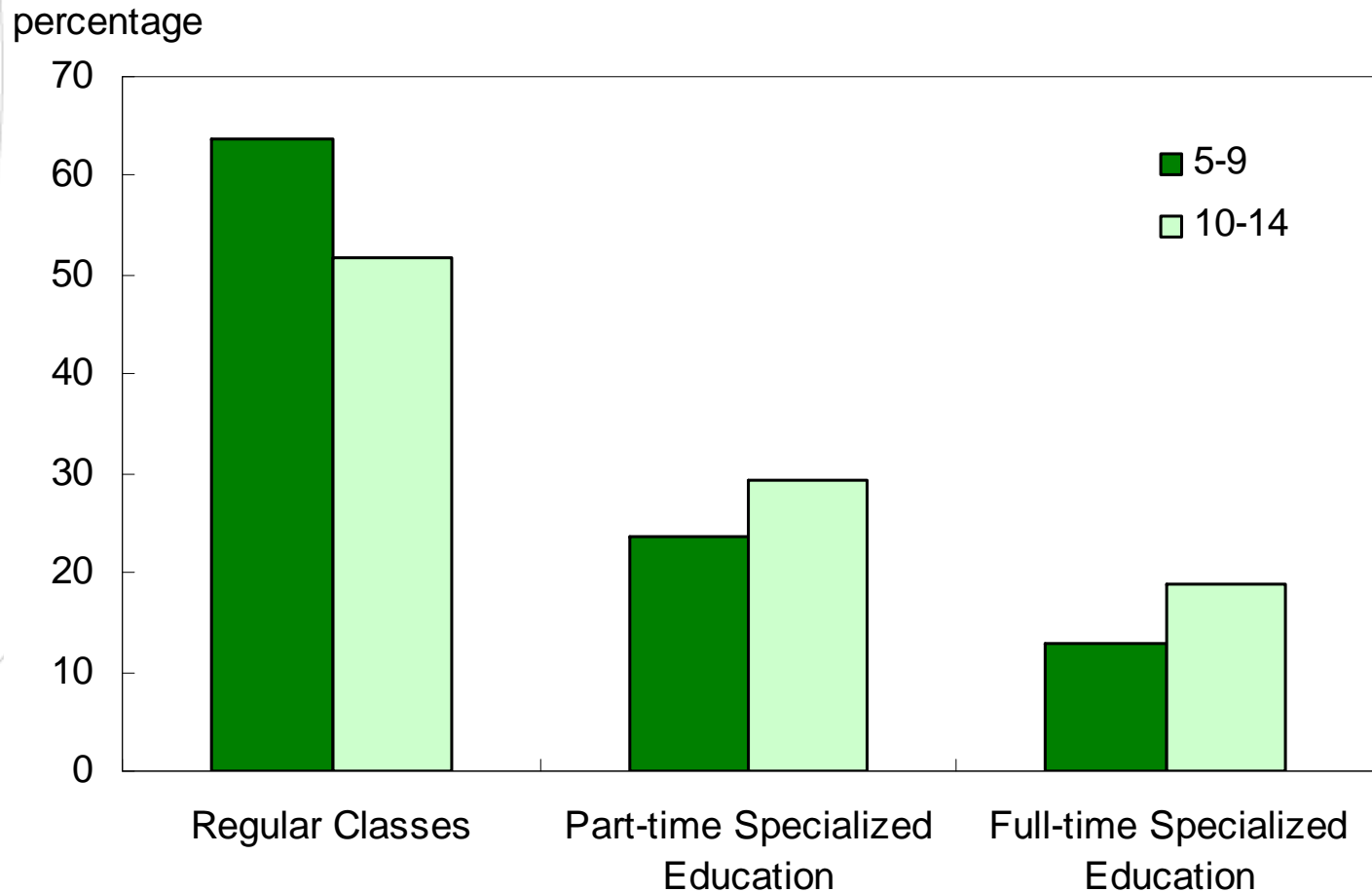




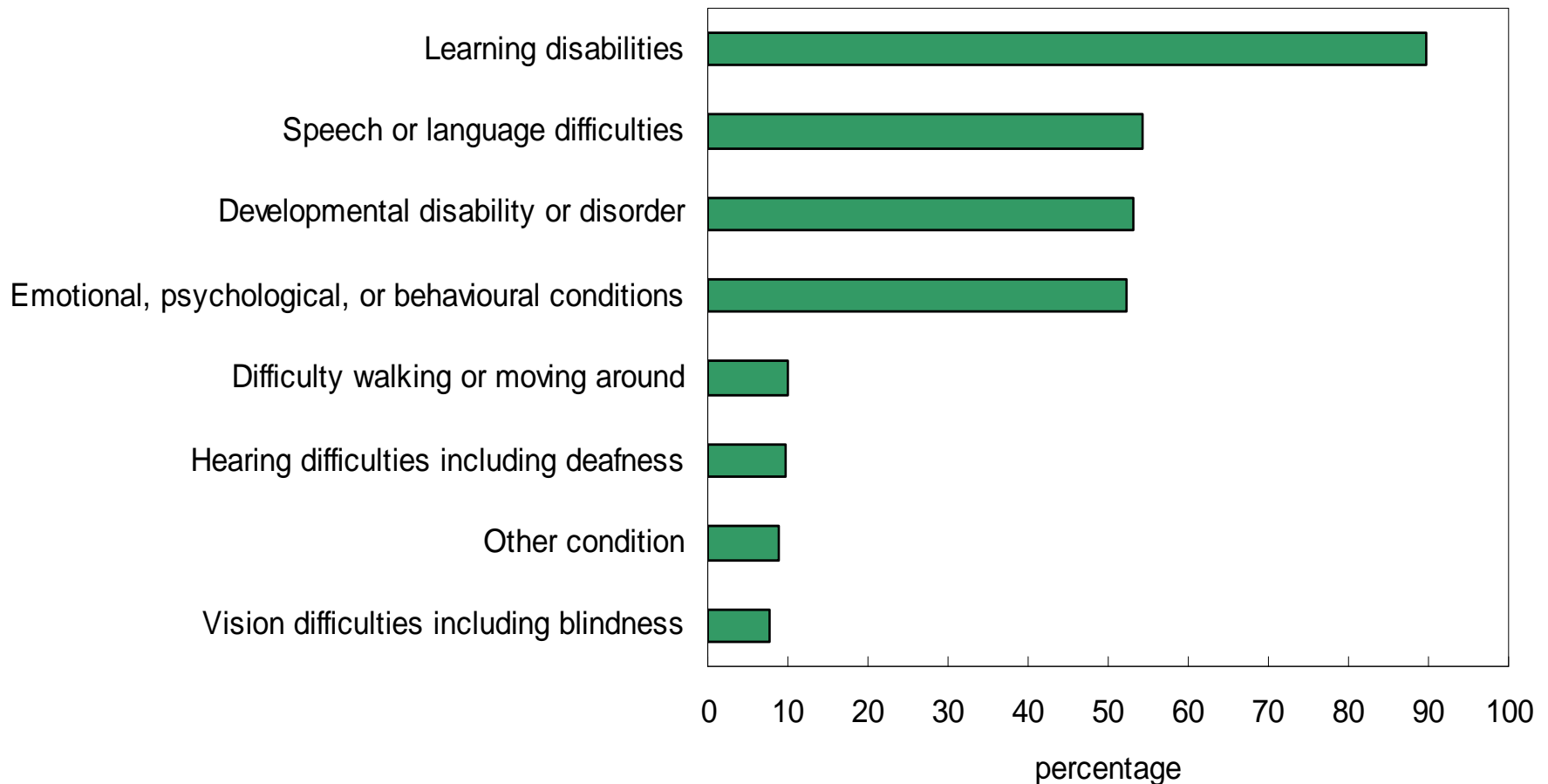
Results from the 2006 PALS

Special education for children

Type of education received for children with disabilities aged 5 to 14

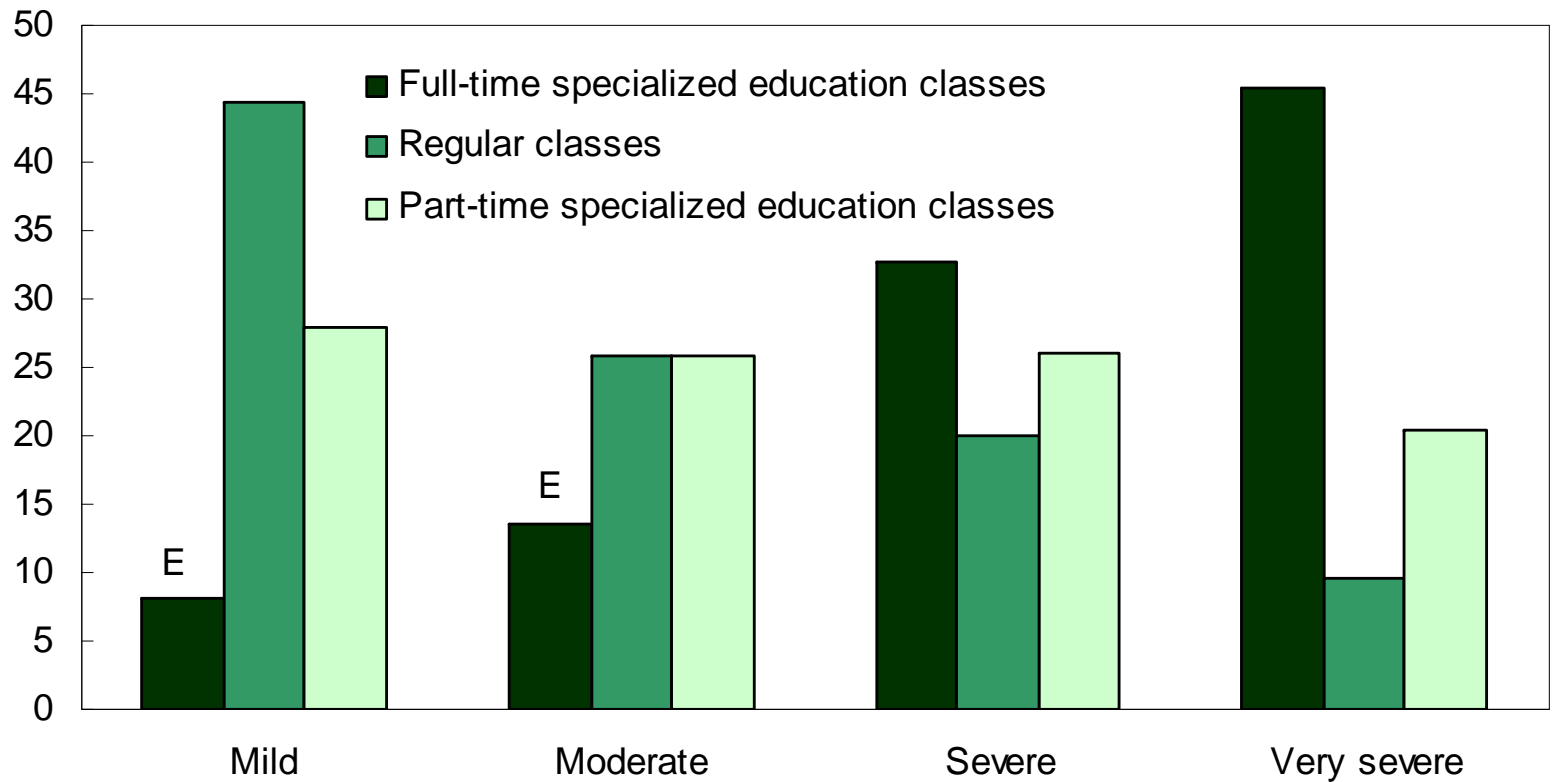


Conditions among children with disabilities aged 5 to 14 requiring specialized education



Type of education by severity

percentage



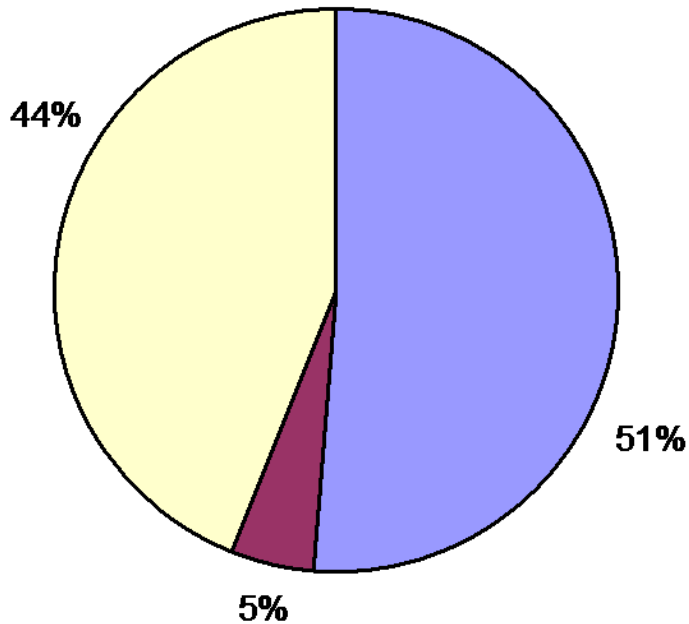


Results from the 2006 PALS

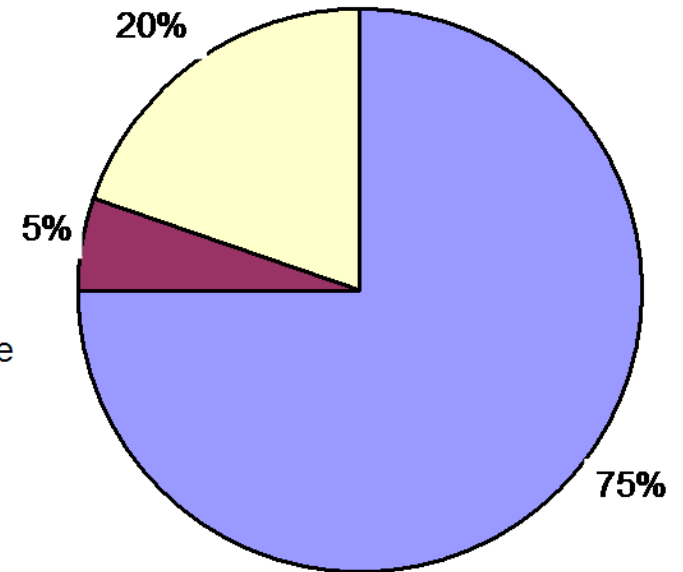
Employment results

Labour force status for people with and without disabilities

People with Disabilities

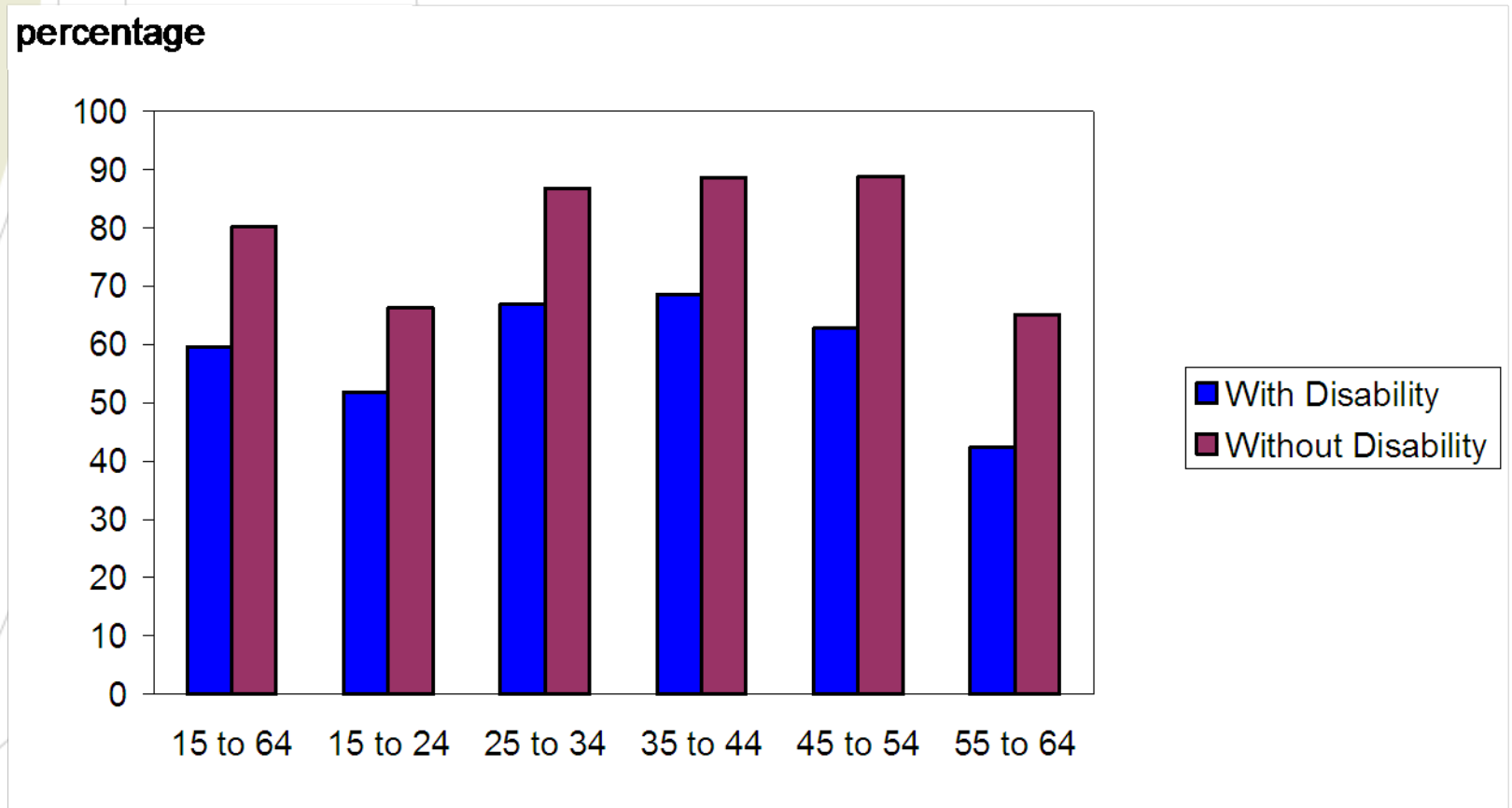


People without Disabilities



- Employed
- Unemployed
- Not in Labour Force

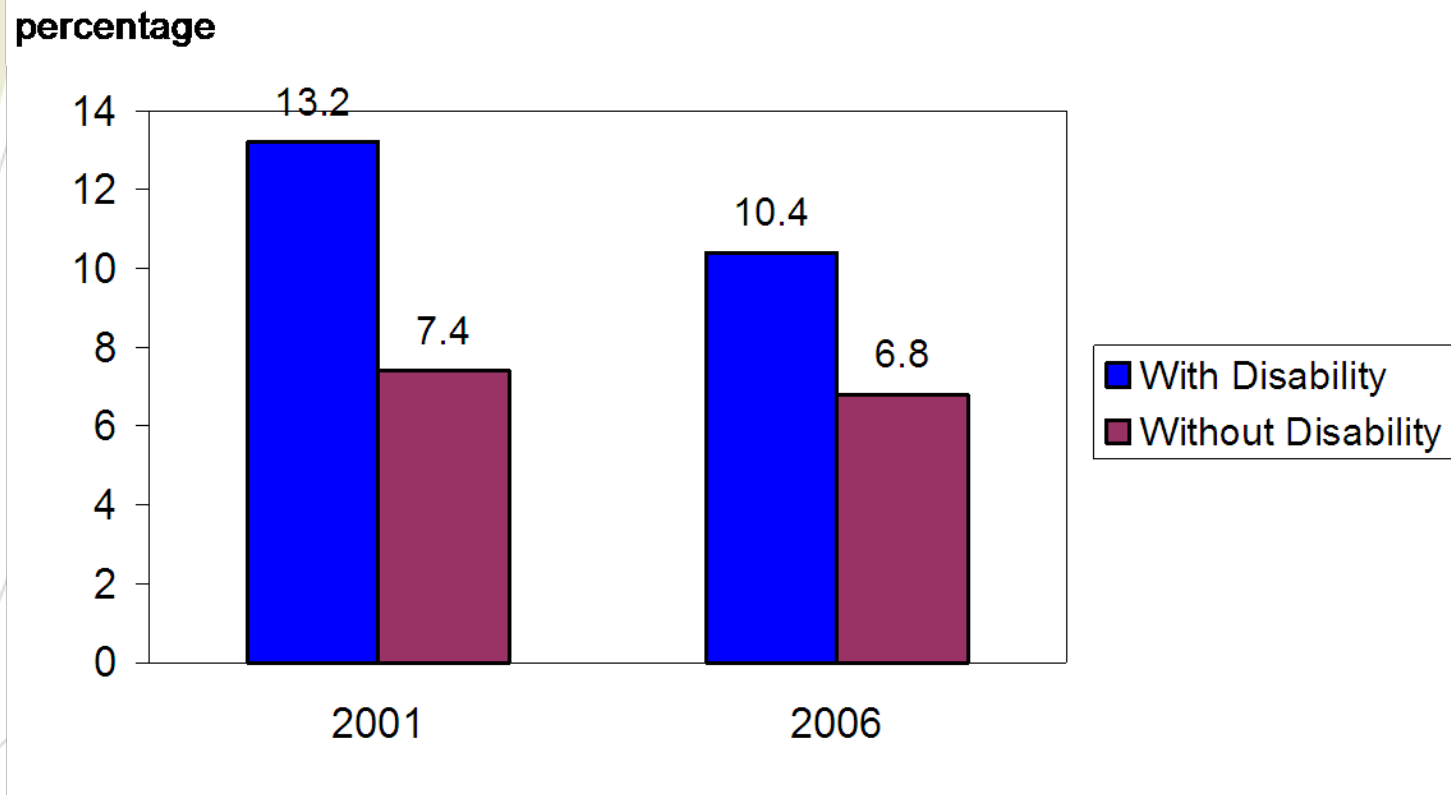
Labour force participation rate by age group



Note: Includes Yukon, Northwest Territories and Nunavut.

Source: Statistics Canada, *Participation and Activity Limitation Survey, 2006*.

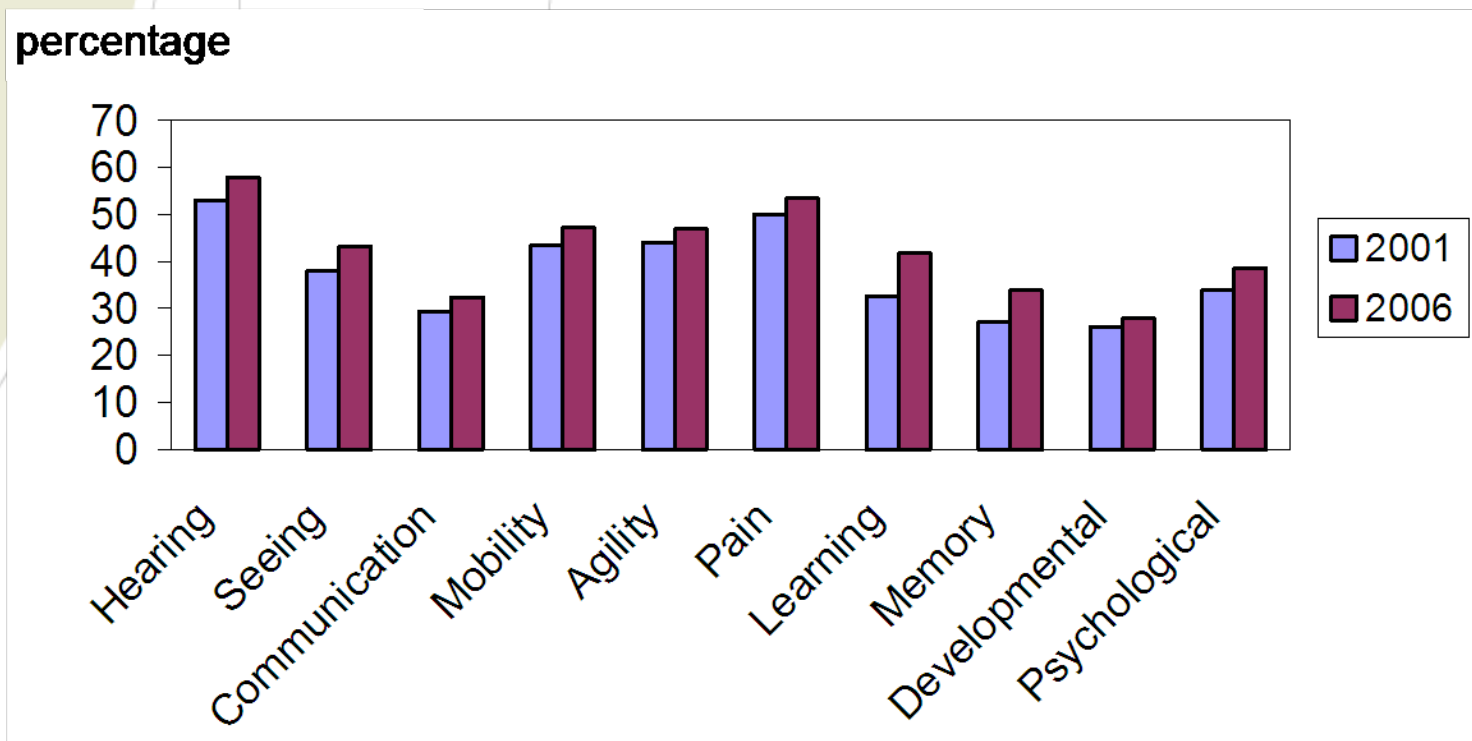
Unemployment rates for people with and without disability



Note: Excludes Yukon, Northwest Territories and Nunavut.

Source: Statistics Canada, *Participation and Activity Limitation Survey, 2001 & 2006.*

Employment rates by type of disability



Note: Excludes Yukon, Northwest Territories and Nunavut.

Source: Statistics Canada, *Participation and Activity Limitation Survey, 2001 & 2006.*



Labour market outcomes for people with disabilities

Factors affecting success

-preliminary results

ICF areas that may affect employment success

- Hearing (b230)
- Seeing (b210)
- Communication (d310-d349)
- Mobility (d410-d469)
- Agility (d440)
- Pain (b280-b289)
- Learning and applying knowledge (d198-d199)

ICF areas that may affect employment success – continued

- Household tasks (d630-d649)
- Education (d810-d839)
- Work and employment (d840-d850)
 - Workplace accommodations (e135)
- Products and Technology (e110-e199)
- Support (e310-e325)
- Attitudes (e430)
 - Positions of authority - employers

Other independent variables included in the models

- Age
- Sex
- Severity of limitation

Methods

- **Logistic regression**
 - Entry ascending and descending
 - Stepwise selection @ 0.05 alpha level
- **Modelled**
 - Likelihood person is employed
 - Likelihood person is unemployed
- **Software**
 - SUDAAN with bootstrap weights to correct design effects

Factors affecting the likelihood of being employed

- Factors encouraging employment
 - Mobility limitation (d410-d469)
 - Hearing limitation (b230)
 - Pain limitation (b280-b289)
- Factors discouraging employment
 - Age
 - Severity
 - High school education or less (d820)
 - Refused workplace accommodations (e135)
 - Employer discrimination (e430-positions of authority)

Factors affecting the likelihood of being unemployed

- Factors encouraging unemployment

- Age
- Severity
- Sex

- Factors discouraging unemployment

- College or trades diploma / degree (d830)
- Mobility limitation (d410-d469)
- Self-perception of disadvantage (b1266)
- Refused a job due to limitation (e430-positions of authority)



Questions?

Thank you!

For more information:

Susan Stobert
Manager, PALS
(613) 951-6496

susan.stobert@statcan.gc.ca

Andrew MacKenzie
Senior Analyst, PALS
(613) 951-2544

andrew.mackenzie@statcan.gc.ca

