

## HEALTH AND LEARNING

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### **Distribution of Health Literacy in Canada**

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### Outline

- What is health literacy?
- Why health literacy matters in Canada
- Distribution of health literacy skills
- Vulnerable groups
- National progress

## Health Literacy is...

- the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course (Rootman and Gordon-El-Bihbety, CPHA, 2008).



## Why Health Literacy matters in Canada

- Large numbers of people appear to have low levels of health literacy
- Lower levels of health literacy appear to be related to poorer health outcomes
- Increasing rates of chronic disease will increase the need for health literacy skills
- Lower health literacy appears to be related to higher health care costs
- Increasing complexity of the healthcare system and the deluge of health information now available put high demands on people for health literacy skills
- Low health literacy may reflect inequities in health

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### Many people in Canada have low levels of HL

- Based on the 2003 IALSS, **11.7 million** working age residents of Canada (55%) are estimated to lack the minimum level of health literacy needed to effectively manage their health information needs (CCL, 2007a).
- When seniors are added, an estimated **14.8 million** may be without adequate health literacy skills. An estimated 88% of respondents 65+ fell below Level 3 on the Health Literacy Scale in the 2003 IALSS survey (CCL, 2007a).

Level 3 is considered the minimum level of proficiency required to meet the demands of modern day life including those posed by health information

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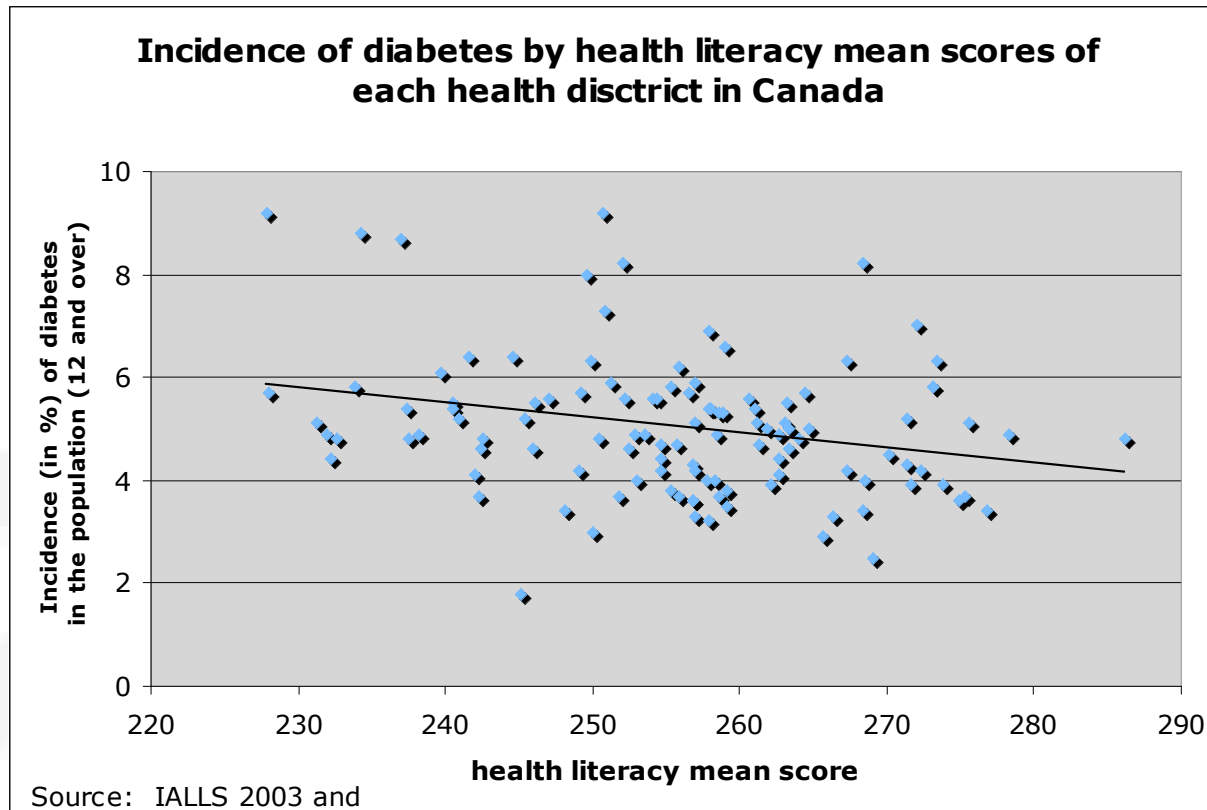
### Health Literacy Scores by Self-perceived General Health Status, Canada, 2003



Source: CCL, 2007b, CCL, based on IALSS 2003

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Source: CCL, 2008, based on IALSS 2003

### **Increasing chronic disease and health literacy**

- The number of people with diabetes in Canada is projected to increase from approximately 1.4 million patients in 2000 to 2.4 million in 2016 (Ohinmaa, et al., 2004)
- One of the ways to address chronic disease which is being increasingly used is patient self-management (McGowan, 2005)
- Low health literacy is a barrier to effective self-management. A review of randomized control trial studies found that 62% of patients with lower reading skill levels were unable or unwilling to engage in self-management (Johnston et al., 2006)
- Improving literacy and health literacy should lead to improved self-management of chronic diseases

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### **Health Literacy (Reading Proficiency) and Cost:**

- An analysis of expenditure data from a study of public hospital patients found that predicted in-patient spending for a patient with inadequate HL (Reading Proficiency) was \$993 higher than a patient with adequate reading skills. A difference of \$450 remained after controlling for health status (IOM, 2004).
- Another study which looked at Medicare users found that the Medicare costs of those with less than a 3rd-grade reading level were \$10,688/year, while the costs for those with greater than 4th-grade reading level were \$2,891 (Weiss and Palmer, 2004)

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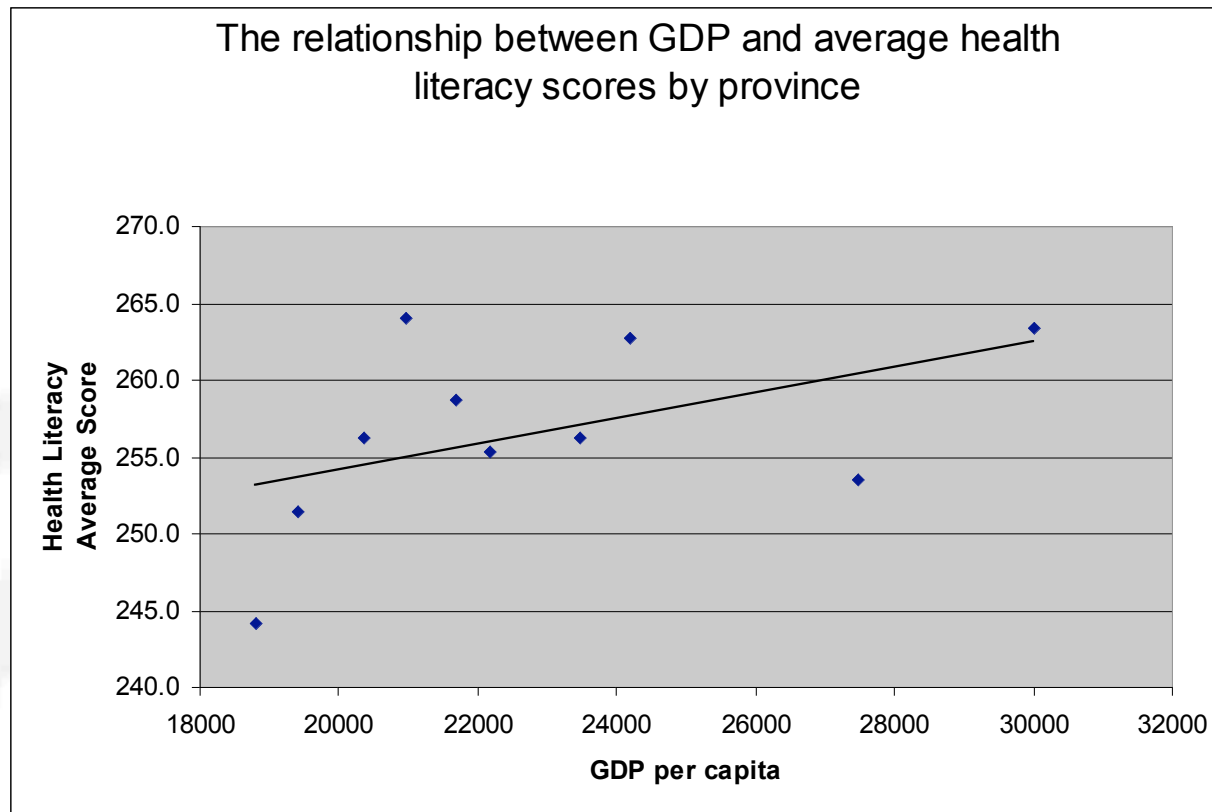
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### Estimated Economic Drain of Low Health Literacy on U.S. Economy:

- “initial approximation places an order of magnitude of the cost of low health literacy to the U.S. Economy in the range of **\$106 billion to \$238 billion annually**” (Vernon et al., 2007)
- “When one accounts for the future costs of low health literacy that result from current actions (or lack of action), the real present day cost of low health literacy is closer in range to **\$1.6 trillion to \$3.6 trillion**” (Vernon et al., 2007)

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Source: CCL, 2008, based on IALSS 2003

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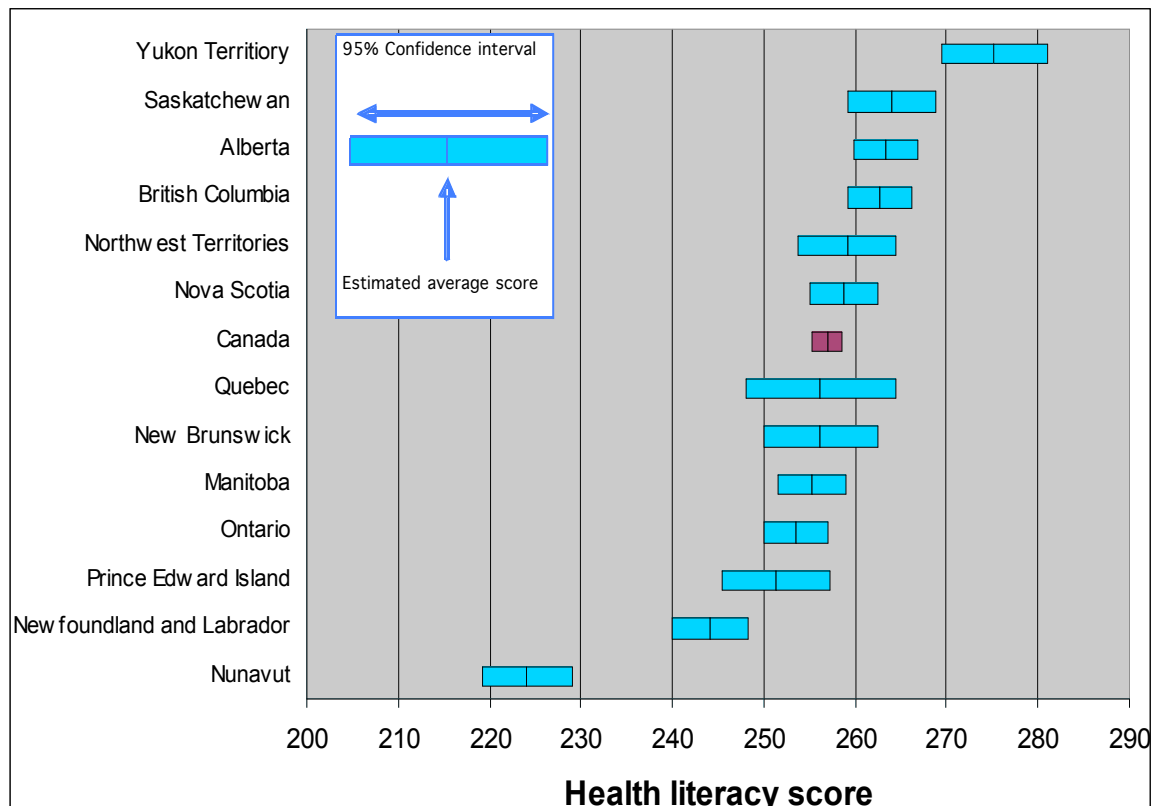
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### **Demands of health information materials:**

- Over 800 studies have found that health-related material for patient education far exceeds the reading levels of the average adult (Rudd, 2007)
- A recent study of health information websites in Canada, the U.K. and Australia found that the content of all sites was written at a higher level than recommended by literacy organizations. The lowest level was grade 11 (Petch, 2004)

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Source: CCL, 2007b, based on IALSS 2003

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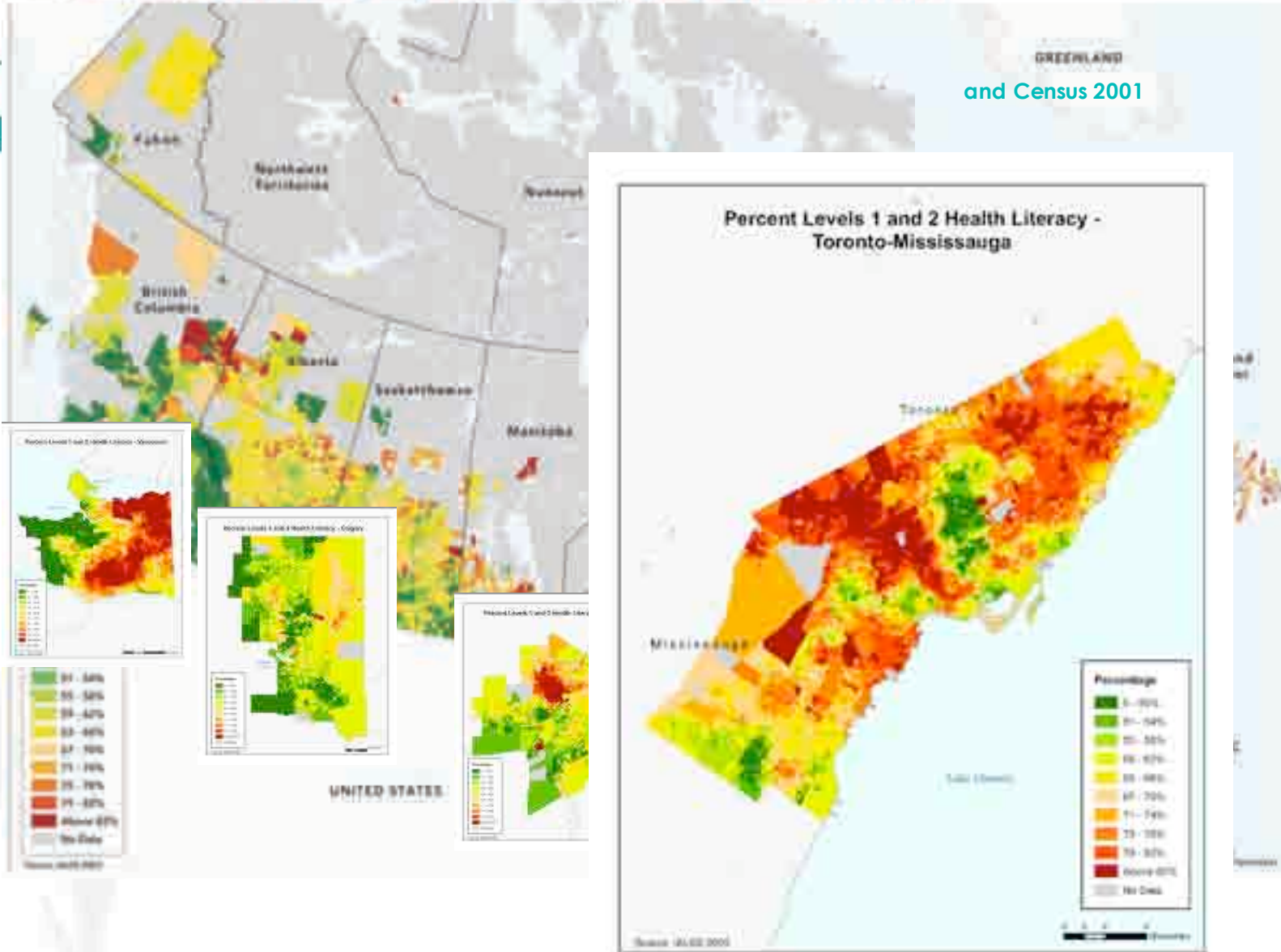
Source: CCL, 2008, based on IALSS 2003

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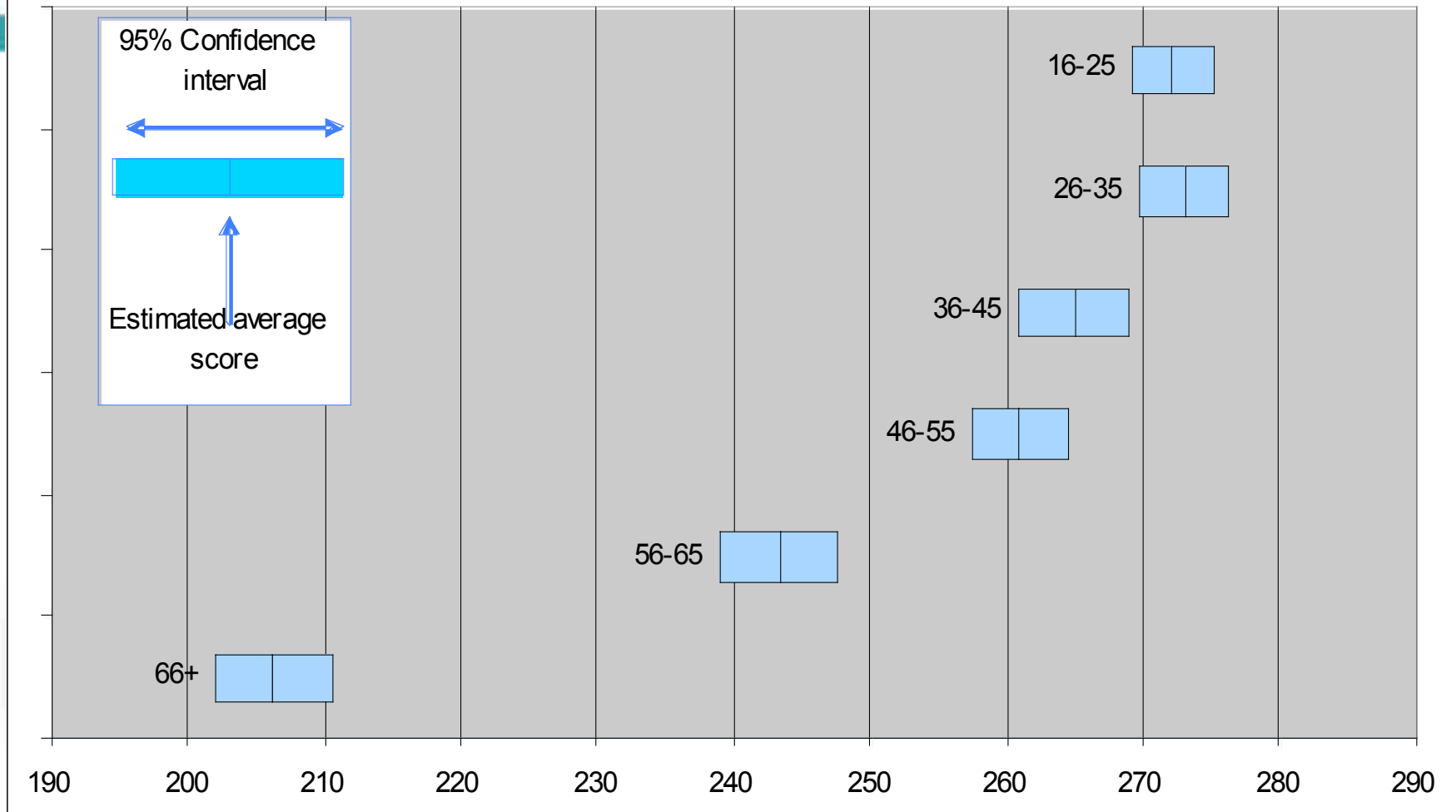


Figure 6: Proportion of adult health literacy at level 2 and below, ages 16 and older, IALSS 2003



The analysis and mapping of the health-literacy results were conducted by J. Douglas Willms, Canada Research Chair in Human Development at the University of New Brunswick (UNB), with the assistance of Teresa Tang, GIS Programmer at the Canadian Research Institute for Social Policy at UNB

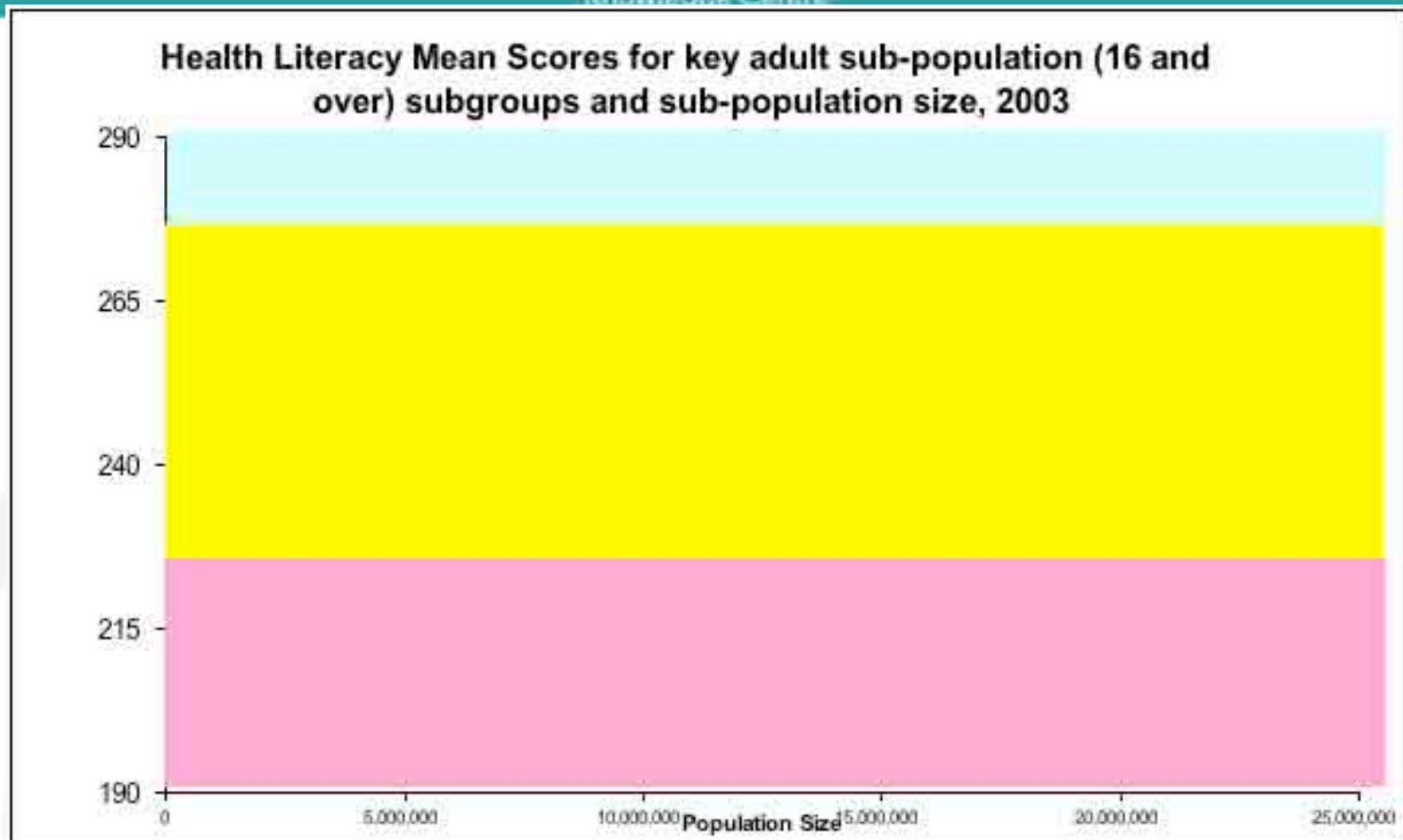
## Health Literacy Scores and Confidence Intervals by Age Group, Canada, 2003



Source: CCL, 2008, based on IALSS 2003

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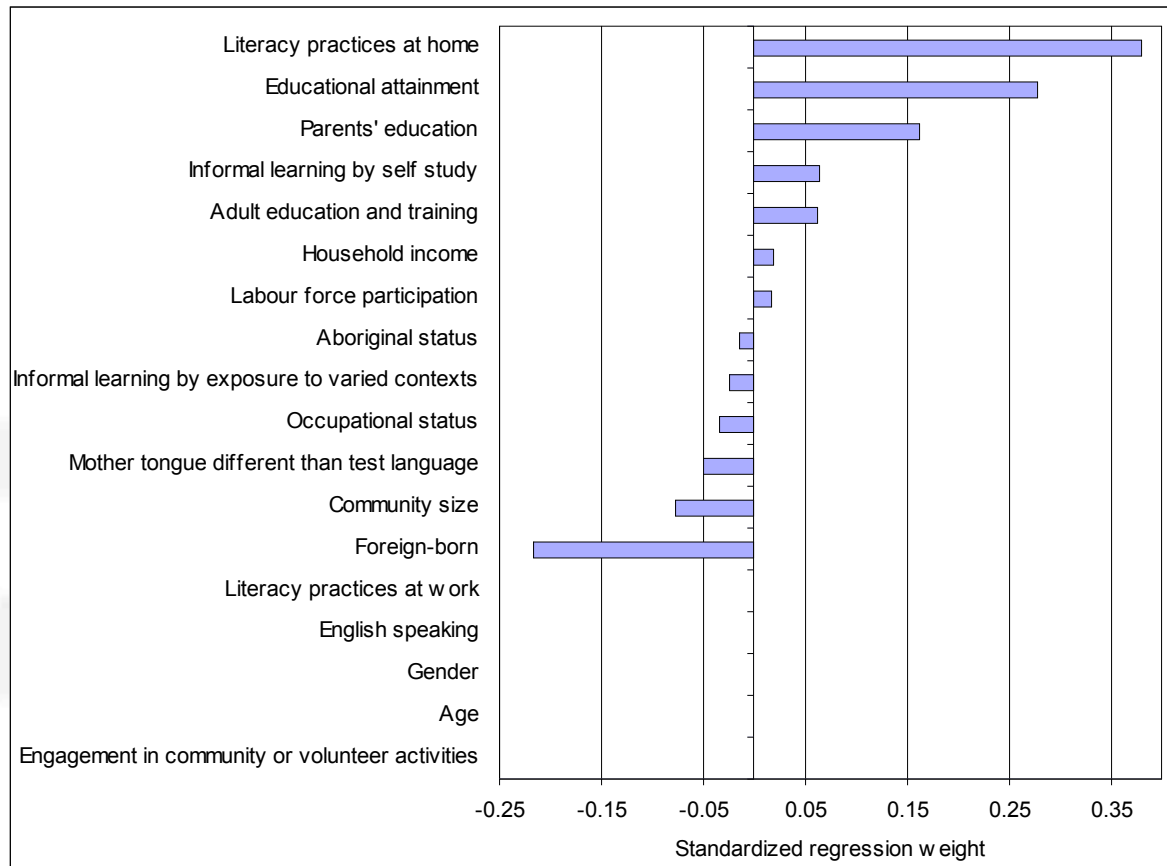
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Source: CCL, 2008, based on IALSS 2003

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### Factors Predicting Health Literacy for Adults aged 16-65



Source: CCL, 2008, based on IALSS 2003

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### **National Progress in Health Literacy in Canada in Last Decade**

- 2000: Workshop at First Canadian Conference on Literacy and Health
- 2004: Workshop at Second Canadian Conference on Literacy and Health
- 2005: Establishment of CCL Health and Learning Knowledge Centre with Health Literacy as cross-cutting theme
- 2006: Establishment of Expert Panel on Health Literacy
- 2007: Publication of national data on Health Literacy
- 2008: Release of Expert Panel on Health Literacy Report; National Symposium on Health Literacy; Workshops at CPHA Conference

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