

Workers with lower literacy skills

A profile using data from the Adult Literacy
and Life Skills Survey 2006

Literacy and Numeracy Forum

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Sylvia Dixon & Carmel Tuya

Department of Labour

Department of Labour
TE TARI MAHI



Overview

- Background
- Personal characteristics
- Job characteristics
- Types of firms and industries
- Education and training rates and patterns



Key points preview

- Characteristics most correlated with lower literacy skills in the workforce
 - Low educational attainment
 - English as second language
 - Working in a low skilled occupation
- 38 percent of workers with lower literacy skills (level 1 or 2) had done some structured education or training in the past year



About the data source and literacy measures

The ALL Survey

- Representative sample of 7000 NZ residents, aged 16-65, in 2006-07.
- Measured literacy and numeracy skills through direct testing

Key results: Proportion of employed adults with 'low' literacy skills

- 12 percent were at Level 1
- 28 percent were at Level 2
- 40 percent in total had relatively 'low' literacy

Value of ALL data

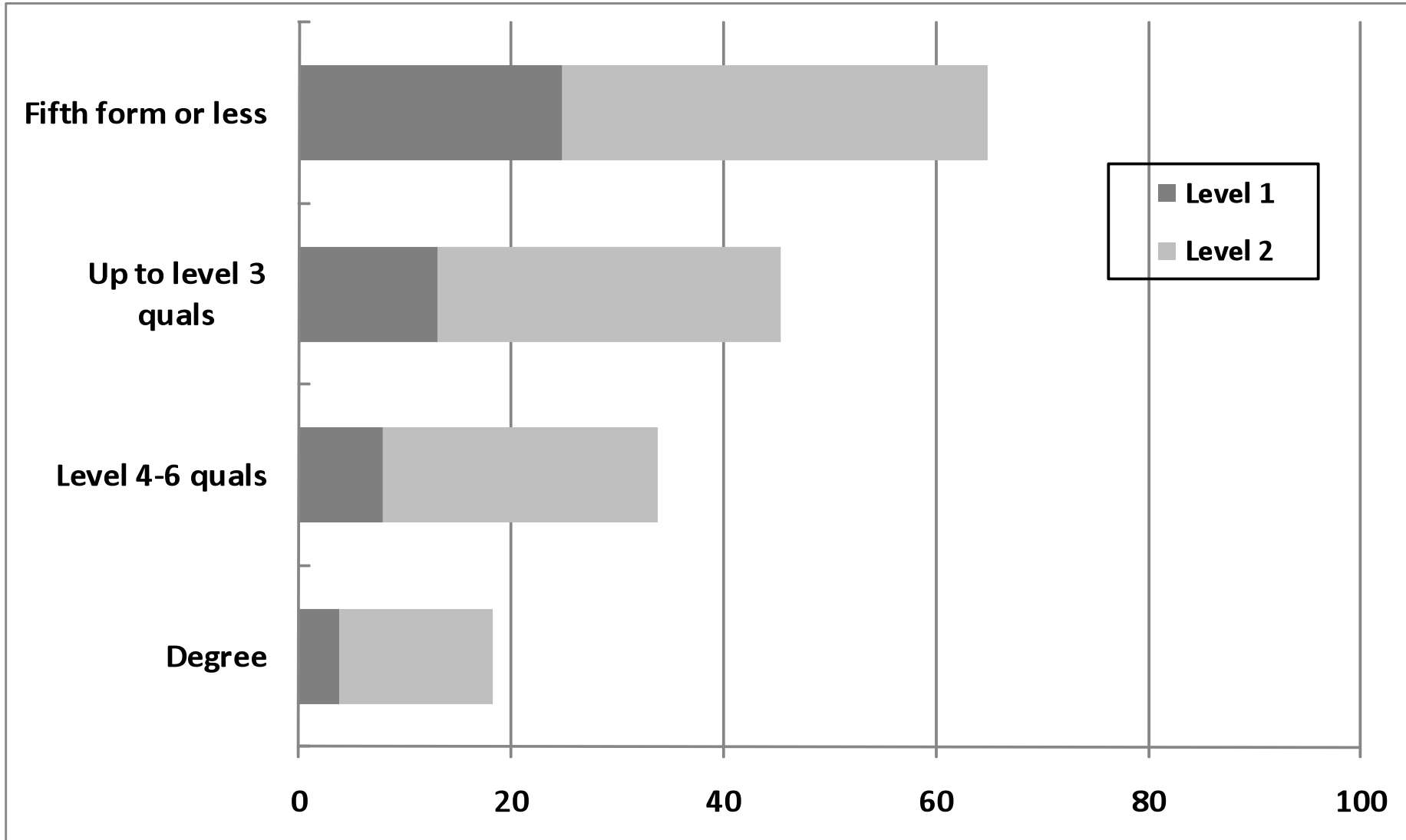
- Social context of survey did not necessarily support good measurement of literacy skills
- Useful evidence on *patterns of variation in literacy skills* across different groups in the labour force

1. Personal and job characteristics

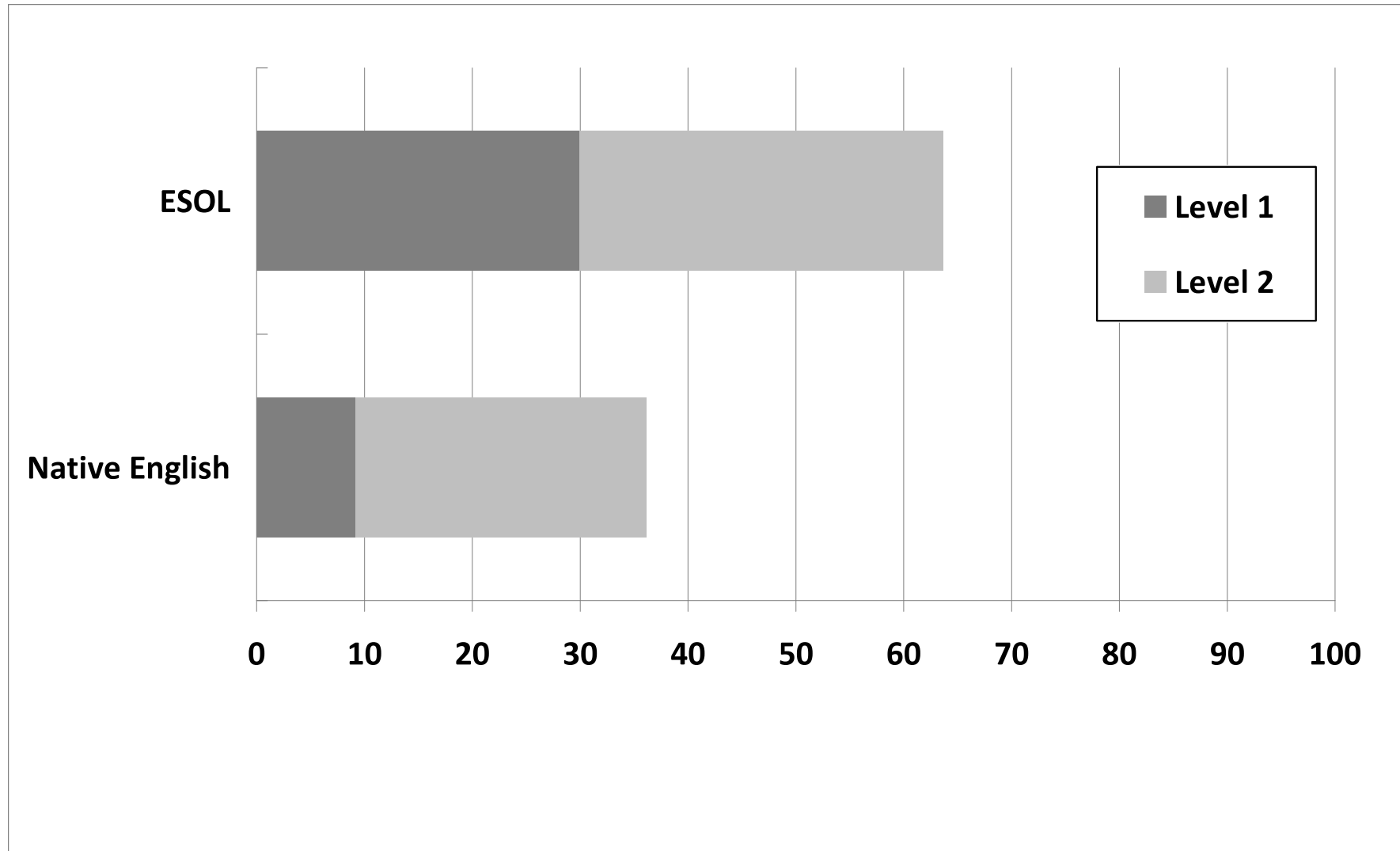
- Educational attainment
- Language background
- Ethnicity
- Occupation
- Wage rates



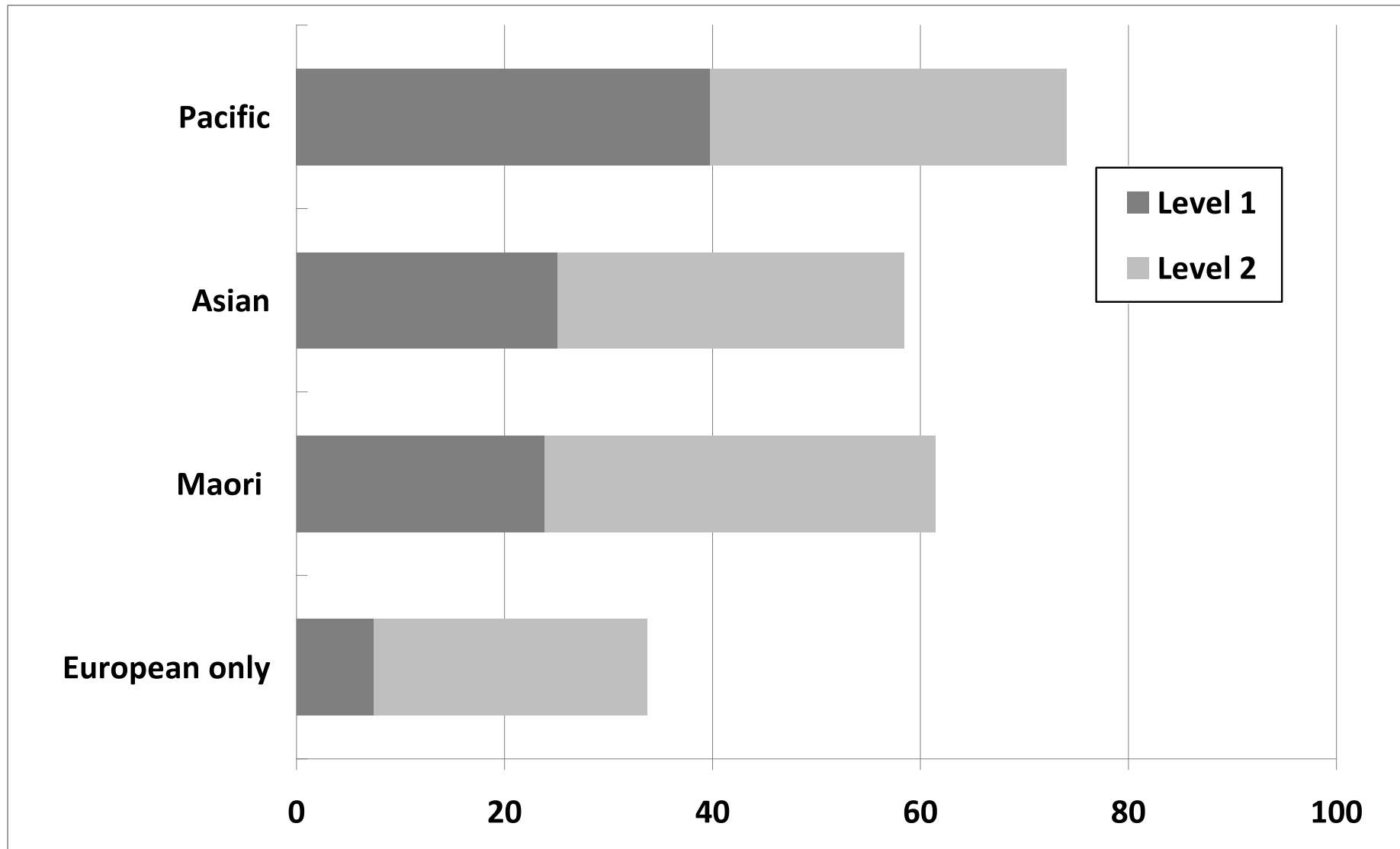
Workers with little education are more likely to have lower literacy skills



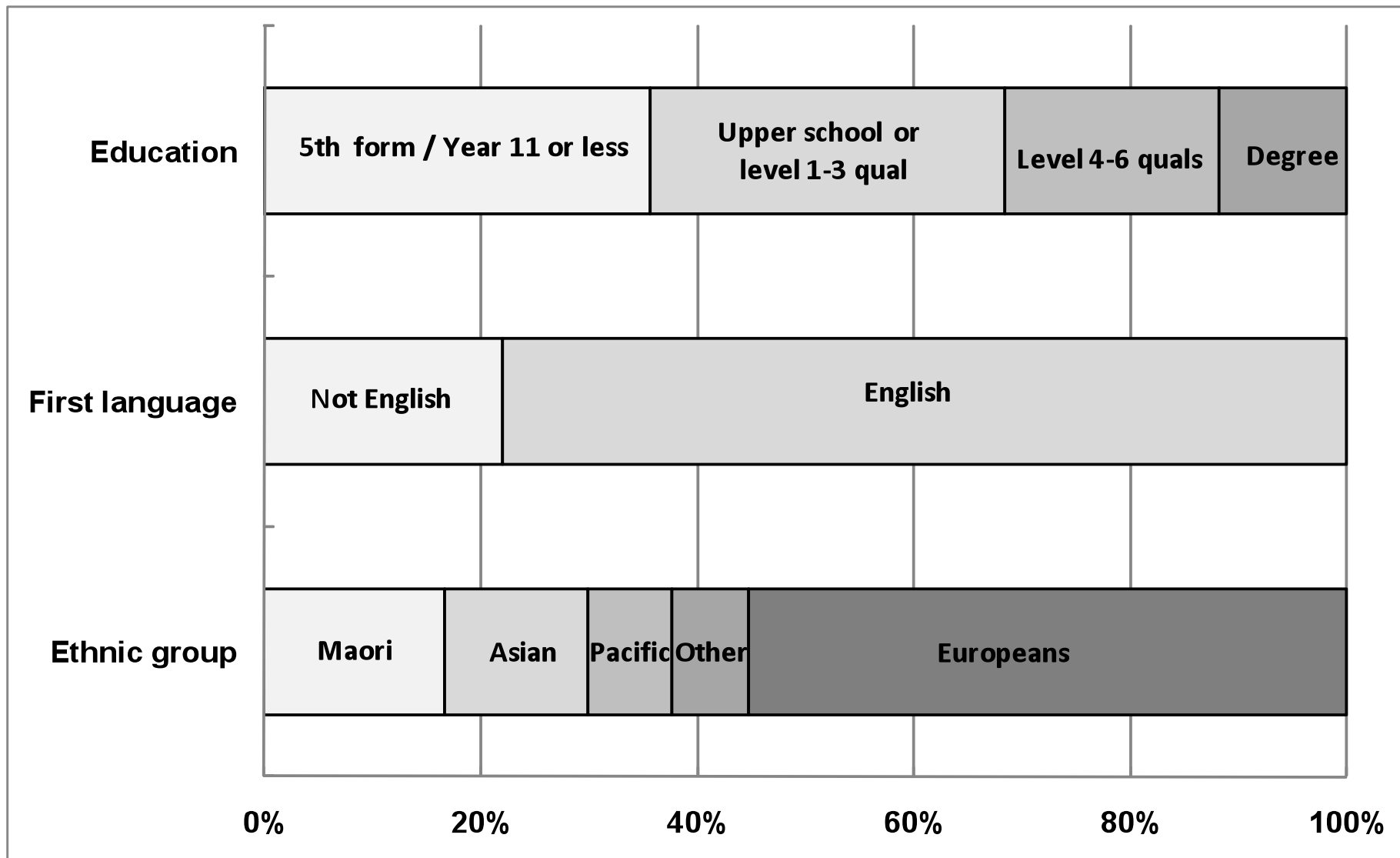
ESOL is a good 'predictor' of lower literacy (in English)



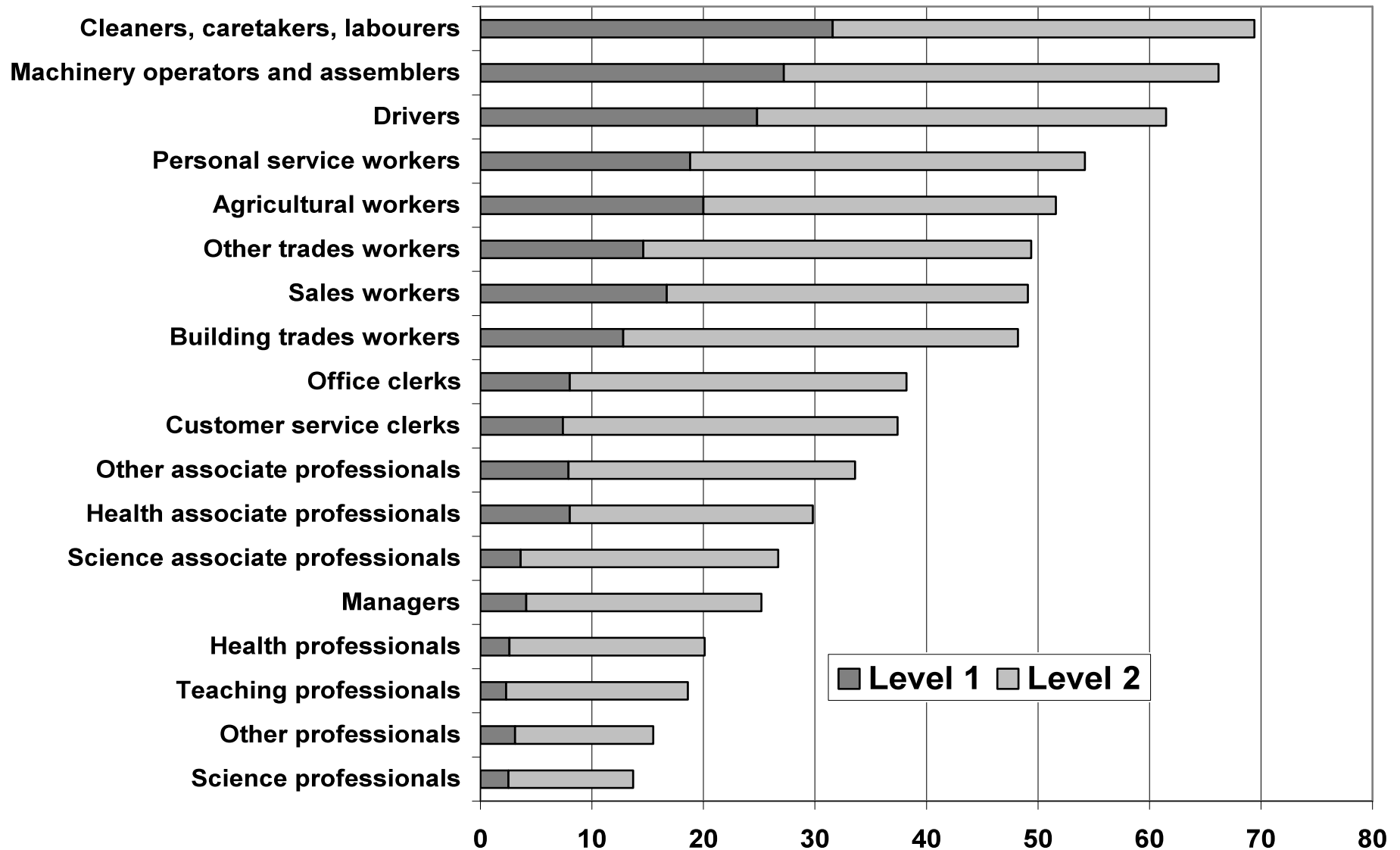
Minority ethnic group members more likely to be at level 1 or 2



Profile of all workers whose literacy skills were at level 1 or 2



Occupational skill level is another good 'predictor' of likely level of literacy skill



Which occupational groups do the greatest numbers of less literate adults work in?

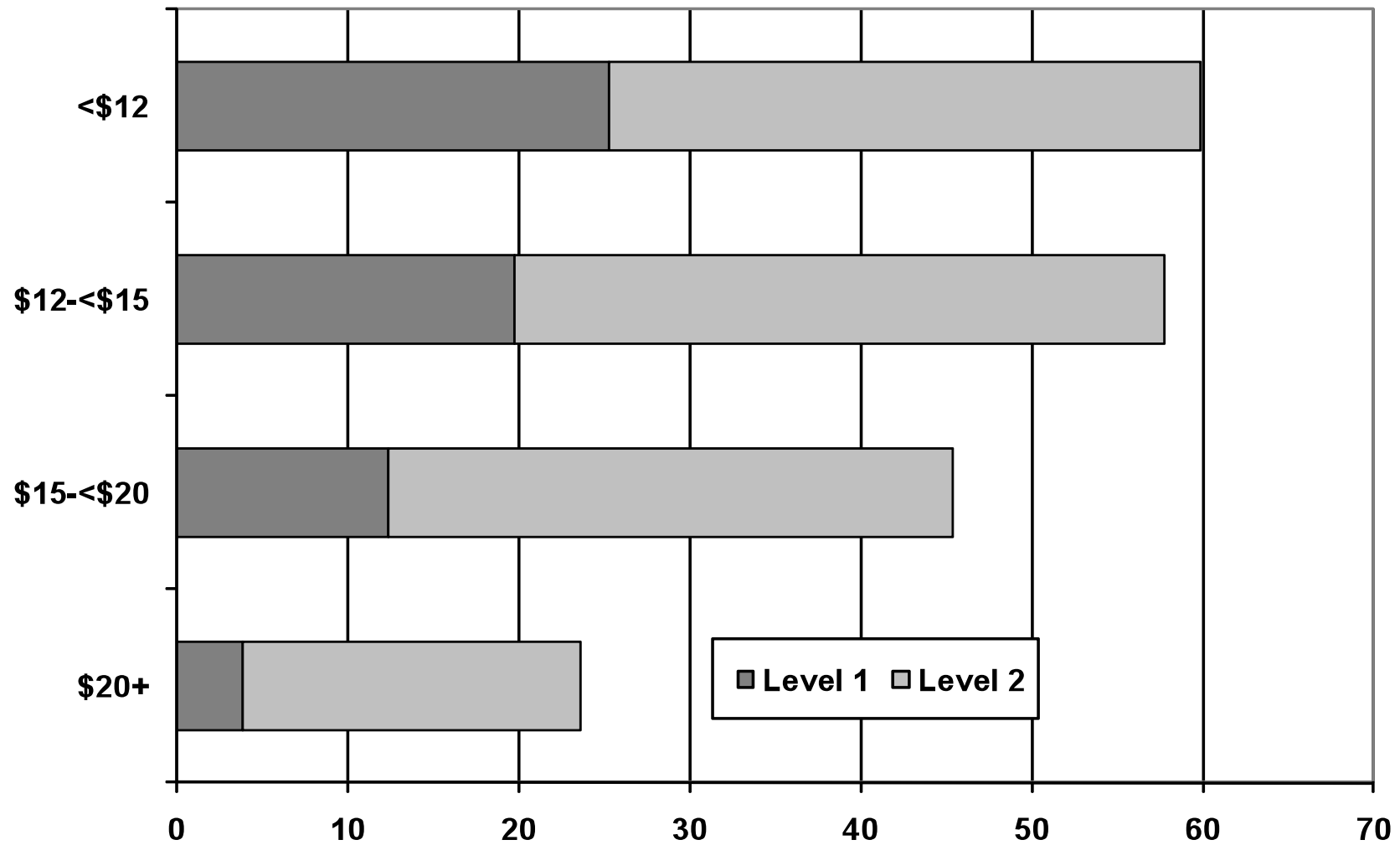
Top 5 occupational groups (NZSCO 2-digit)

	%
Personal service workers	13.4
Office clerks	9.9
Machinery operators and assemblers	9.6
Agricultural workers	8.8
Elementary occupations	8.1
	<hr/> 50.0

Top 10 *detailed* occupations
where people with level 1 literacy skills were working

	%
Shop salespersons & demonstrators	5.8
Waiters, waitresses & bartenders	4.2
Other office clerks	3.0
Child-care workers	2.4
Cooks	2.2
Technical & commercial sales representatives	2.2
Dairy & livestock producers	2.2
Handpackers & other manufacturing labourers	2.0
Kitchen hand, hotel cleaner	2.0
Institution-based personal care workers	1.9

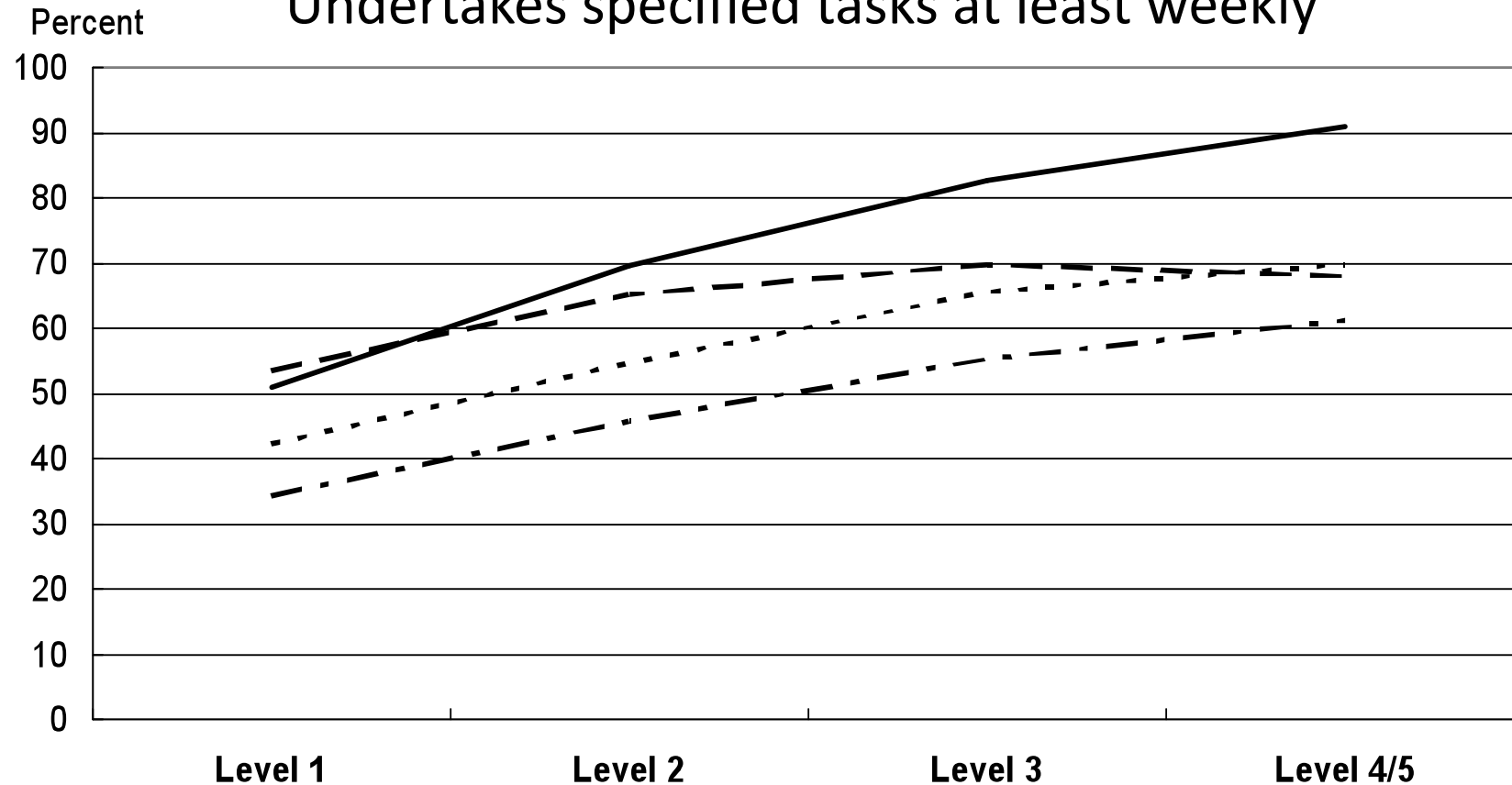
Employees in low paid jobs more likely to have lower literacy skills



Job characteristics that are *not* correlated with literacy

- Hours of work
- Part-year employment
- Job tenure (duration)

Reading at work by literacy skill: Undertakes specified tasks at least weekly



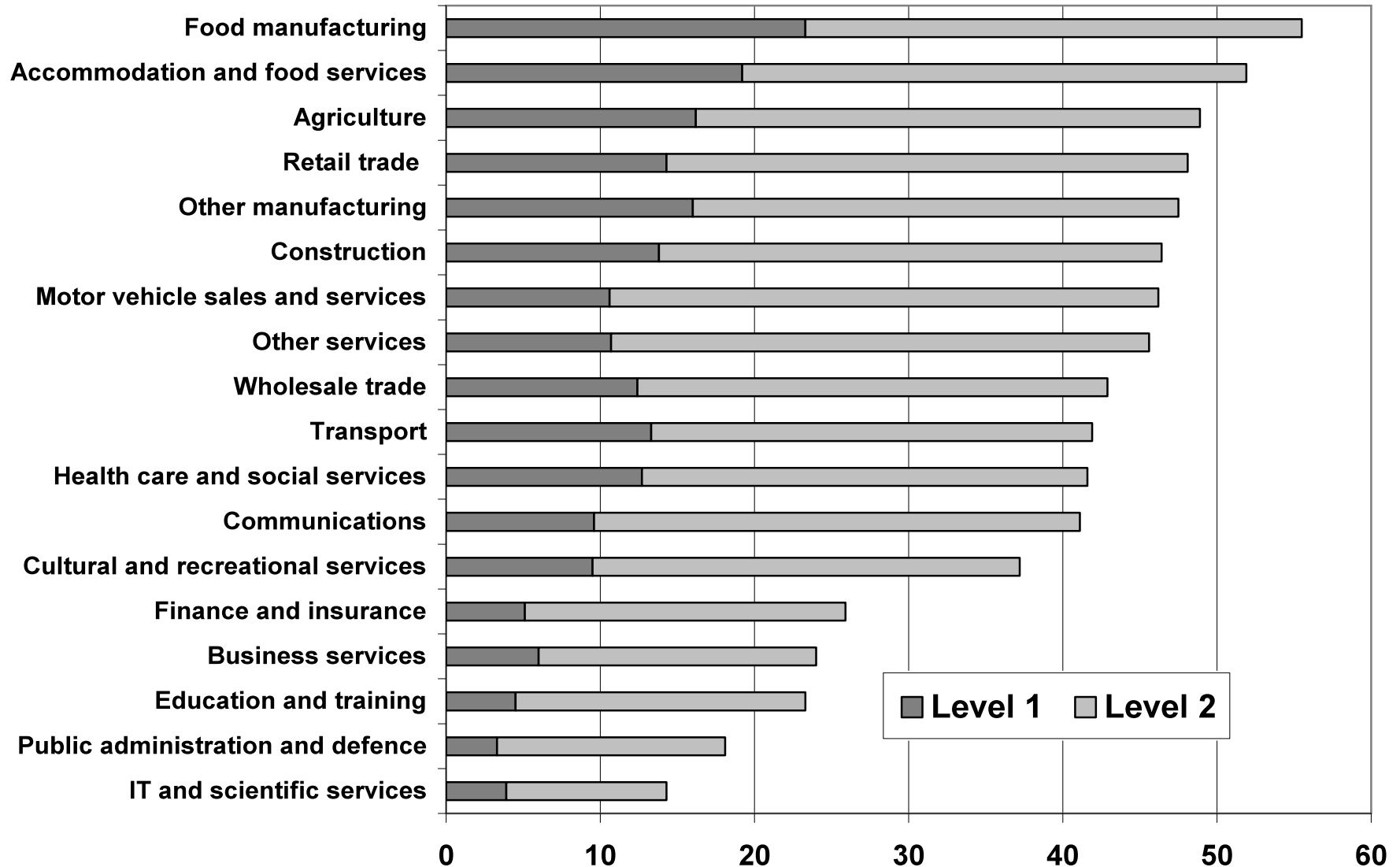
- Read letters, memos or emails
- - - Read manuals or reference books
- - Read directions or instructions
- - Read bills, invoices, spreadsheets or budgets

2. Employers / Firms

- Which industries and firms have the greatest proportions of less literate adults in their workforces?
- Where are less literate workers employed?



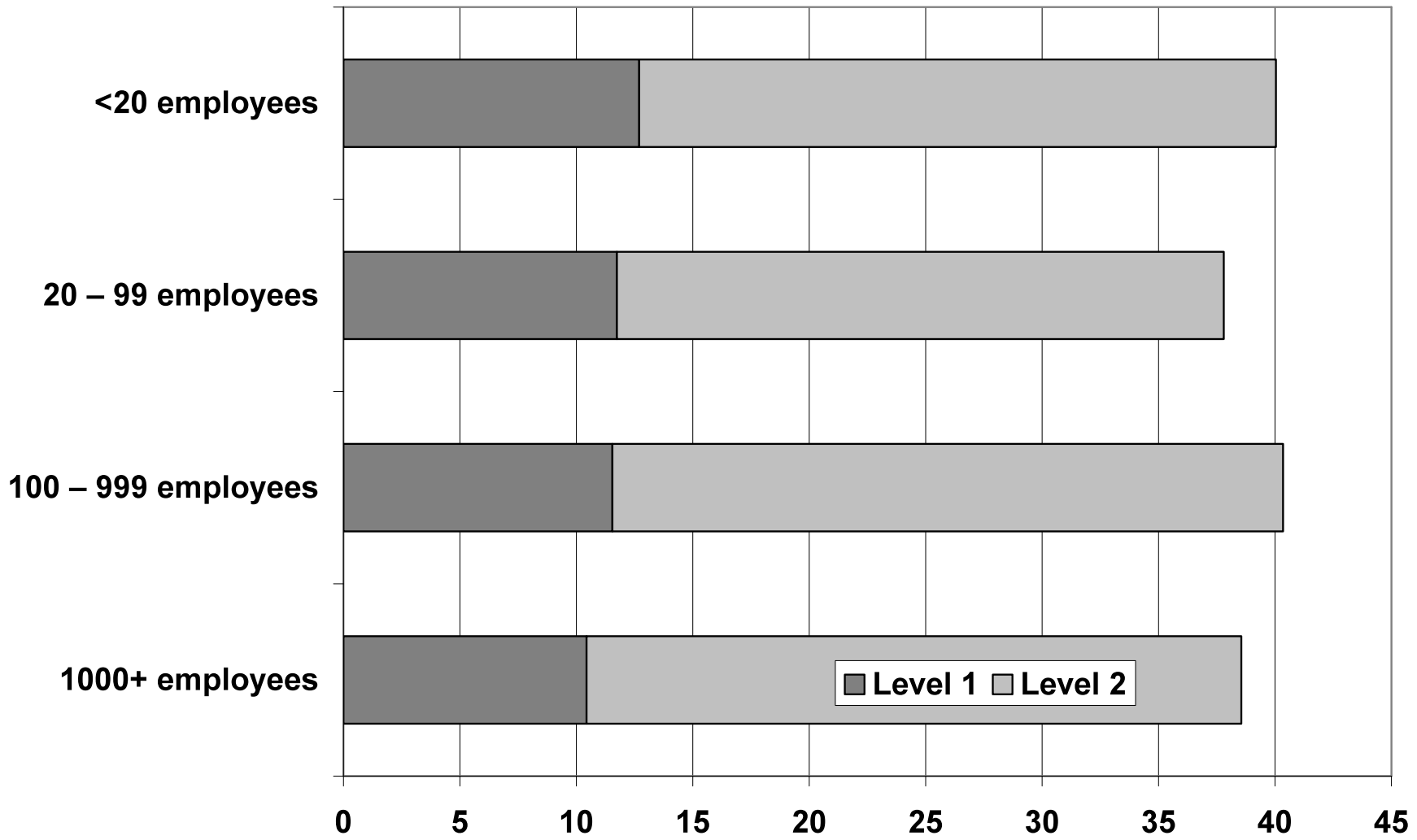
Proportion of workers with lower literacy skills in each industry group



Over 60% of workers with lower literacy skills were employed in these 6 industry groups

	%
Manufacturing	17.2
Health care and social services	10.4
Retail trade	9.1
Agriculture	8.6
Construction	8.4
Accommodation and food services	7.3
	<hr/> 61.0

Proportion of workers with lower literacy skills in firms of different sizes



Less literate workers are well spread across firm size groups

	%
1-19 employees	39
20-99 employees	15
100-999 employees	20
1000+ employees	25
	<hr/>
	100

Conclusion on characteristics and employment patterns

- Best demographic indicators of higher risk of low literacy
 - low educational attainment
 - ESL background
- Best job-related indicator
 - working in a low skilled occupation
- Industry location: Most prevalent in industries that employ large numbers of people in relatively unskilled occupations
 - manufacturing industries, agriculture, accommodation and food services, and retail trade
- Less literate workers are NOT concentrated in part-time or part-year jobs, short-term jobs, or small firms.



3. Further education and training rates

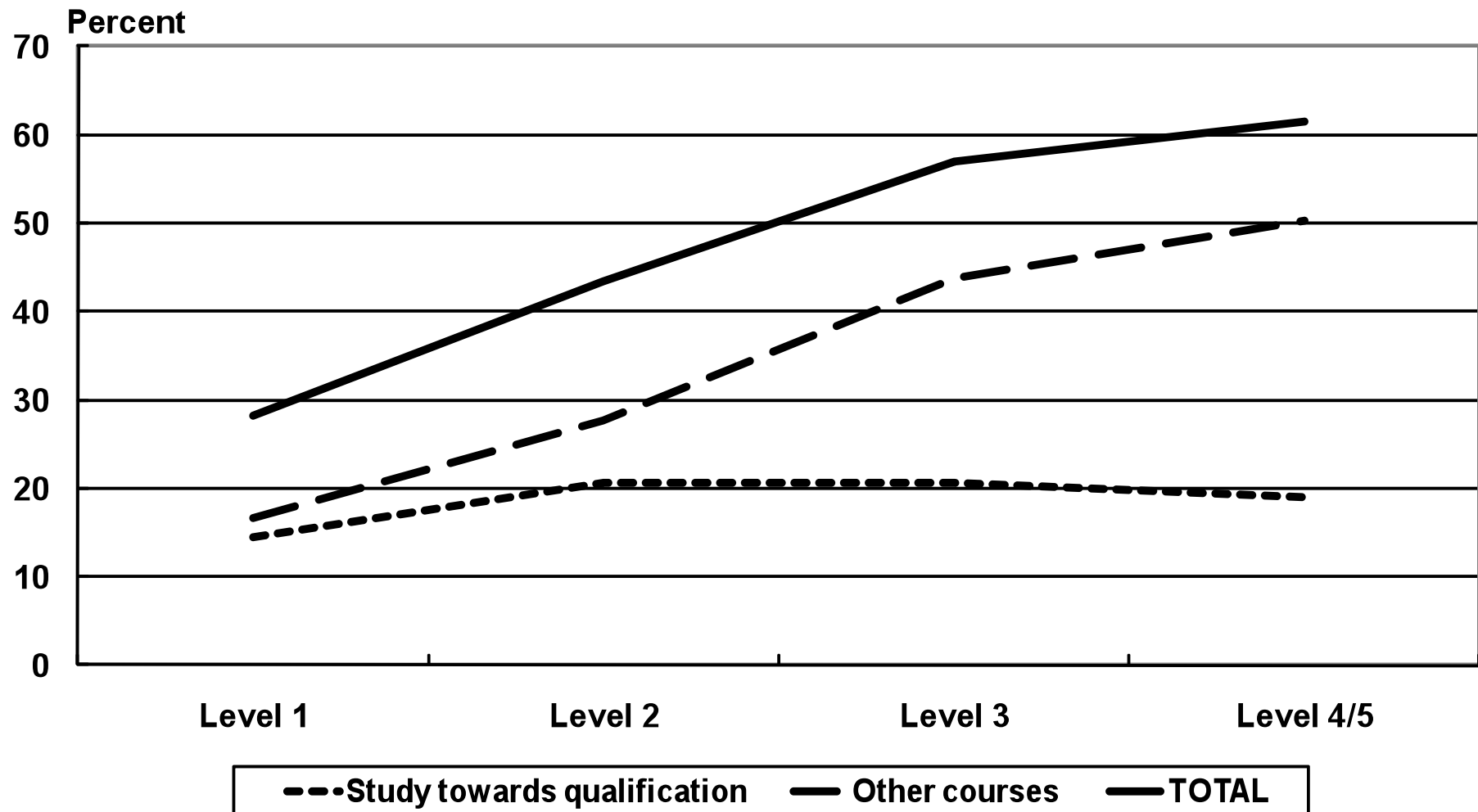
- How many undertake further education and training?
- What were the characteristics of those who undertook further education and training?



Types of education and training measured in ALL

- E&T courses that are linked to a qualification
 - Industry training courses & courses at tertiary institutions that can be credited to a certificate, diploma or degree
- Other formal /structured E&T courses (not linked to qualification)
 - Most likely to be workplace courses that are 100% funded by employers

Further E&T participation rates by literacy skill level (Workers aged 25-65)



Participation in E&T towards a qualification by workers aged 25+ with level 1 or 2 literacy skills

More likely

- Males
- Younger age groups
- Already held a post-school qualification
- Maori
- Worked for a large firm or employer

Little difference /effect

- English first/second language
- Literacy skill score (within levels 1 and 2)

Participation in E&T courses *not* linked to qualifications
by workers aged 25+ with level 1 or 2 literacy skills

More likely

- Worked for a medium-sized or large firm/organisation

Less likely

- Pacific ethnicity
- English second language

Little difference/ effect

- Gender, age group
- Literacy skill score (within levels 1 and 2)

Conclusion on education and training rates

- 38% had undertaken some study or training in past 12 months
 - 19% had studied or trained towards a qualification – similar to more literate workers
 - 25% took courses that were not linked to a qualification – way below participation rate for more literate workers
- Size of the firm influences a worker's opportunities for training, even when other factors are taken into account



Further information

- Department of Labour website
<http://www.dol.govt.nz/publications/research/adult-literacy/index.asp>
- Alison Sutton (2009) 'Understanding the needs of adult literacy and numeracy learners with very low skills'. Report to TEC.

