

Using Big Data: EAP & Degree Success

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Background

- ◆ University of Manitoba
 - 29,000 students; about 12% international
 - Medical-Doctoral, Research Intensive
 - Member of Canada's U15
 - Most Rhodes Scholars of Western Canada
 - Navitas contract for pathway since 2008
 - Strong focus and history on access

- ◆ English Language Centre
 - Part of Enrolment Services in Student Affairs
 - Peers are Admissions, Recruitment, and FA&A
 - 14 week pre-sessional (L5) meets the language requirement for degree study
 - Pre-sessional grads typically study management, engineering, arts, or science (computer science)
 - Student numbers peaked at 850 per year spread over three terms
 - In-sessional courses including a speech tutorial for faculty
 - Homestay Program; IELTS and CanTEST Centres
- ◆ Garry Dyck
 - Instructor since 1990 and Director since 2005 (academic administrator)
 - Currently on research/study leave at HiOA in Oslo, Norway

Big Data - Fort McMurray

- ◆ 90,000 people have lost their homes in Fort McMurray
- ◆ Canada has 10% of the world's forests
- ◆ Canada has 8,300 wildland fires/year (average over past 25 years) resulting in loss of 2.3 m hectares/year
- ◆ 97% of forest fires grow to more than 200 hectares;
3% of forest fires account for 97% of total damage
- ◆ Costs of fire suppression range from \$500m to \$1b /year

Previous Research

- ◆ 2009 - university statistics, 1997 to 2009, including 47,258 students
- ◆ Statistics include 90 columns including nationality, entrance requirements, grades, credit hours, time to completion, and faculty
- ◆ Updated annually
- ◆ ...but does not include...

Previous Research 2011

- ◆ Preliminary study presented at BALEAP Portsmouth based on 51,564 students, 2009 to 2010 (reduced to 30,641 by cleaning data)
- ◆ Results: Students who completed L5 earned higher grades in first year degree study than other international students and than Canadian students and were more likely to persist to graduation (see BALEAP 2011 Proceedings)

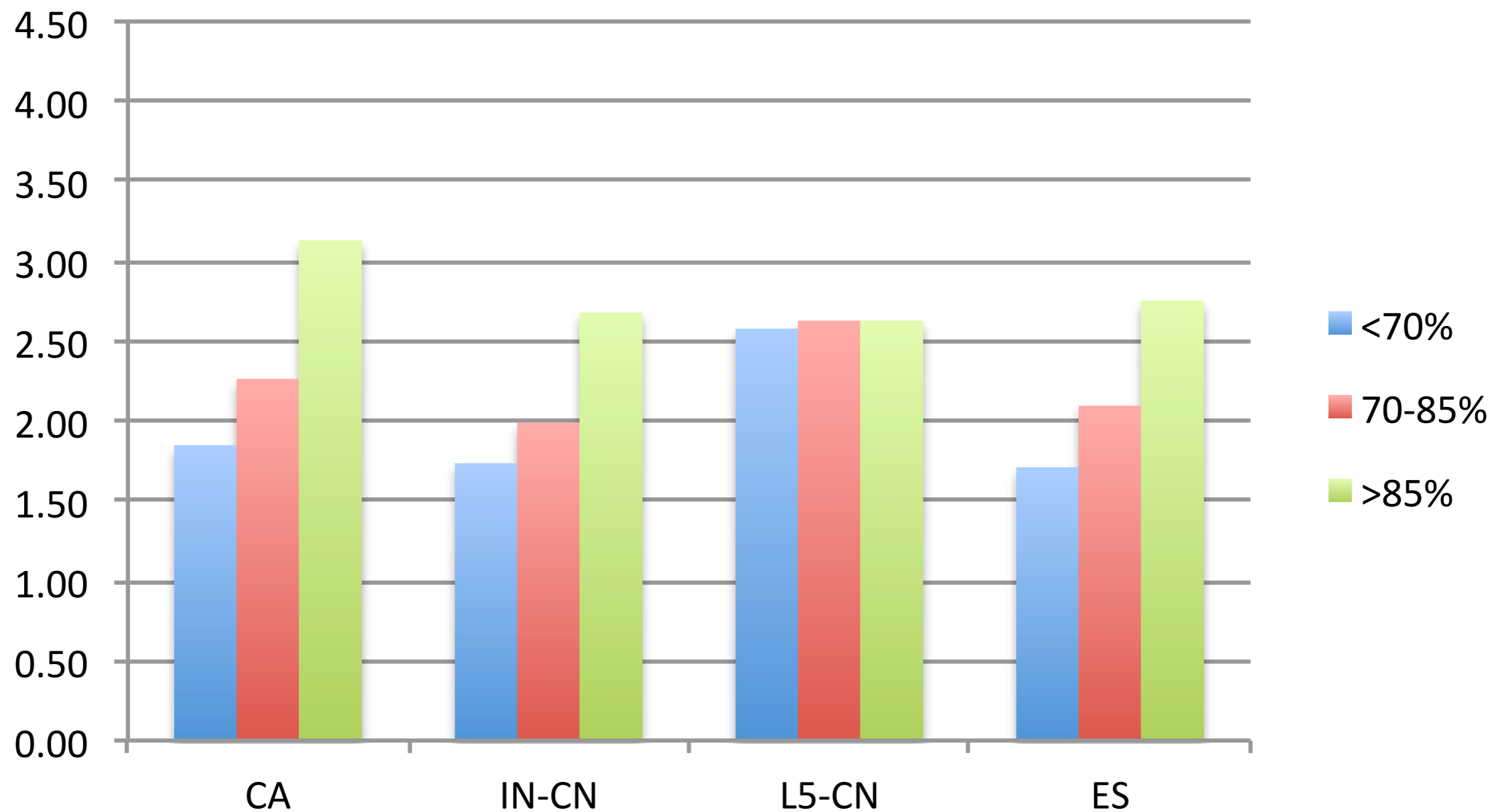
Previous Research 2013

- ◆ Presentation at BALEAP Nottingham based on 60,746 students, 1997 to 2012, with R. Lastra
- ◆ Study of Chinese students who will have completed degree by 2012
- ◆ Survival Analysis method required cohort selection with equal numbers in both L5 and non L5 Chinese students - total of 204 in study
- ◆ Results: Chinese students who completed pre-session increased their degree completion rates; no difference in cGPA (see BALEAP 2013 Proceedings)
- ◆ Discussion: Value of early academic focus

Previous Research 2015

- ◆ Presentation at EFYE Bergen, June 2015, based on 70,251 (reduced to 62,025), with R. Lastra
- ◆ A study of entrance requirements relative to at-risk status of Chinese students after first year of degree
- ◆ Chinese students entering with less than 70% average who have completed L5 are less likely to be at risk than other Chinese students or than English speaking international students or than Canadians

First Year GPA by High School Top 3 Marks

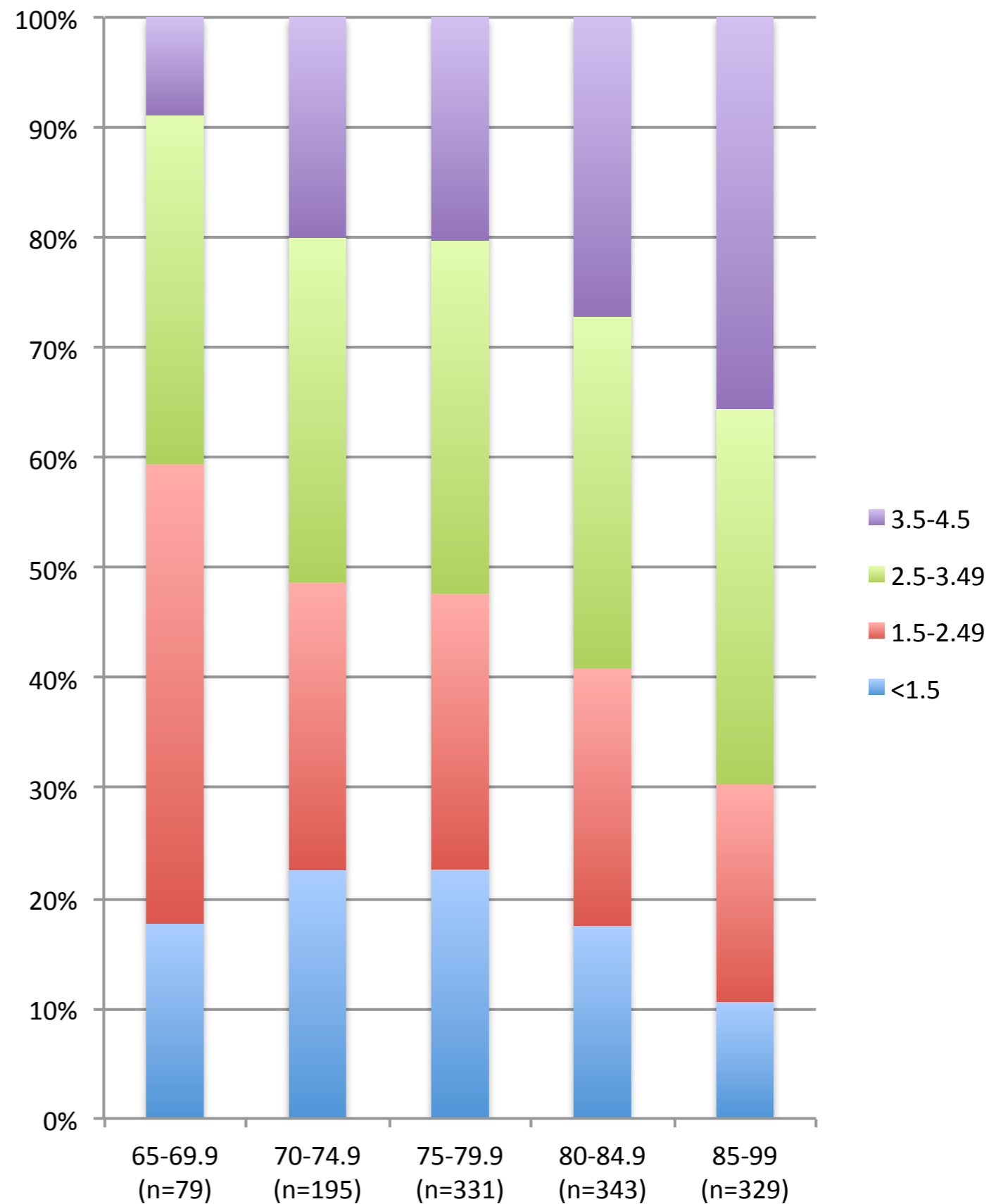


Current study of L5

- ◆ Successful completion of L5 meets the language requirement for degree study
- ◆ 14-week, 24 hours/week of instruction
- ◆ Four separate courses, R, W, L, and S with study skills integrated in each area
- ◆ Writing weighted highest and speaking lowest
- ◆ 65% required with no single area less than 60% for Pass on transcript

- ◆ Current research based on 74,324 students combined L5 completion grades (new column) resulting in 1,295 students
- ◆ Looking at relationship between L5 grades and grades in first year of degree study
- ◆ L5 grades translated to P/F on transcript
- ◆ Is the P/F appropriate? Do those with a minimum pass in L5 do as well in degree study as those who excel in L5?

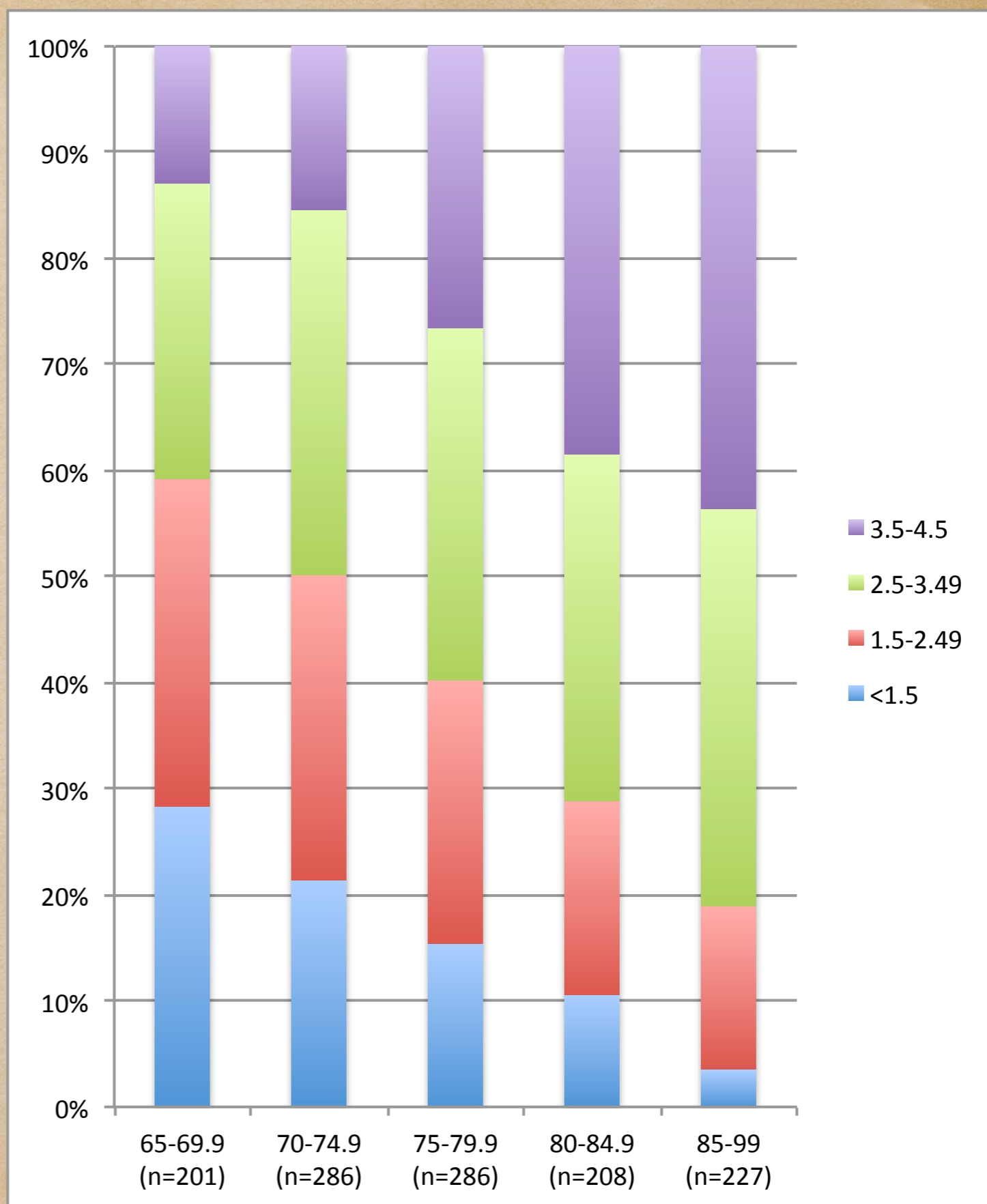
L5 Speaking by Y1 GPA



L5

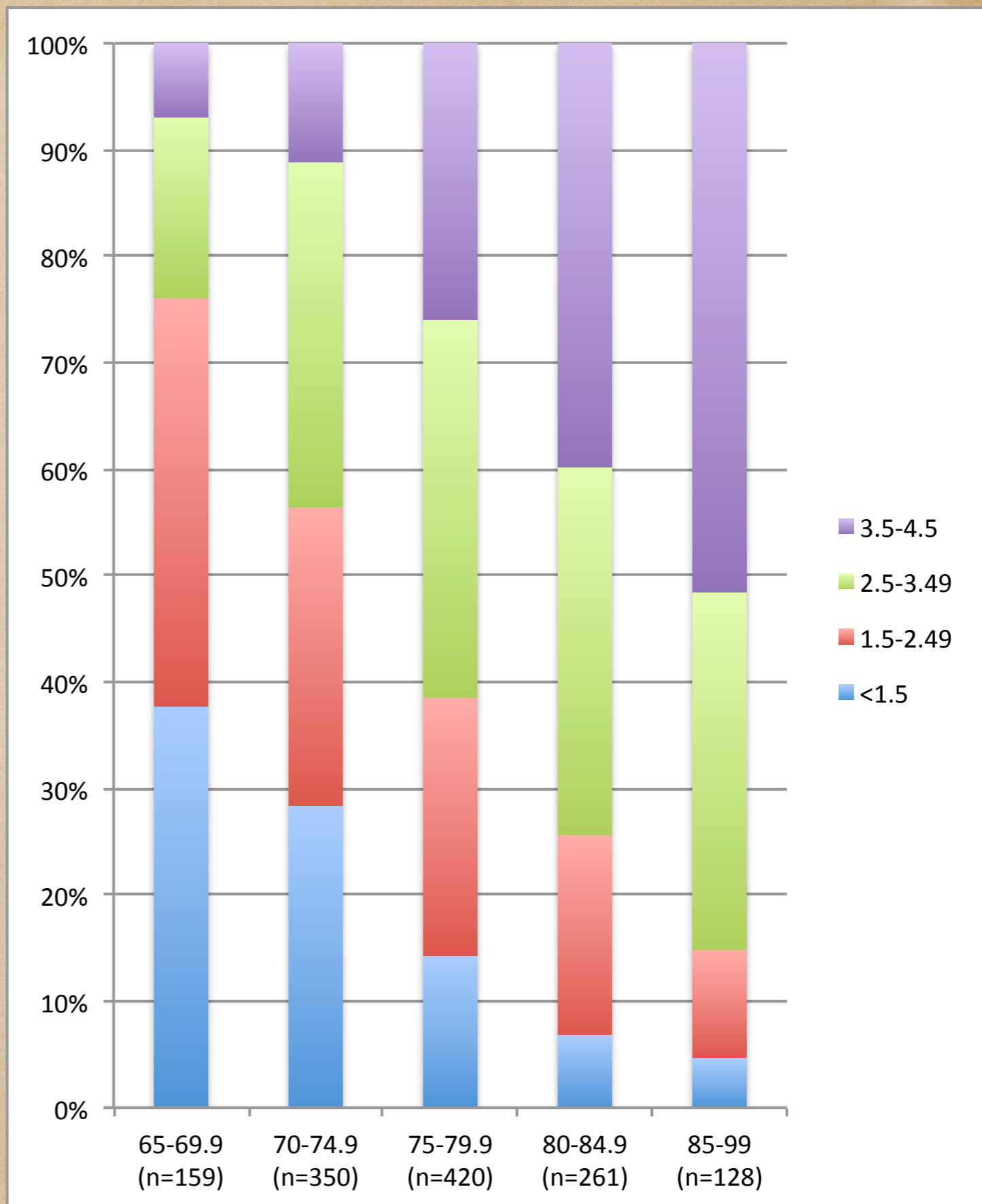
Writing

by Y1 GPA



L5

Final Grade by Y1 GPA



Thank you

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