Supplementary Material: School Belonging Predicts whether an Emerging Adult will be Not in Education, Employment, or Training (NEET) Post High-School

Contents

1 Belonging Question (As they appear in the Student Questionnaire)

1.1 PISA 2003

Q27   My school is a place where:

(Please <tick> only one box in each row.)

	Strongly agree	Agree	Disagree	Strongly disagree
a) I feel like an outsider (or left out of things).	□₁	□₂	□₃	□₄
b) I make friends easily.	□₁	□₂	□₃	□₄
c) I feel like I belong.	□₁	□₂	□₃	□₄
d) I feel awkward and out of place.	□₁	□₂	□₃	□₄
e) Other students seem to like me.	□₁	□₂	□₃	□₄
f) I feel lonely.	□₁	□₂	□₃	□₄

Figure 1: Belonging Questionnaire in PISA 2003

ST034 **Thinking about your school: to what extent do you agree with the following statements?**

(Please select one response in each row.)

		Strongly agree	Agree	Disagree	Strongly disagree
ST034Q01TA	I feel like an outsider (or left out of things) at school.	☐1	☐2	☐3	☐4
ST034Q02TA	I make friends easily at school.	☐1	☐2	☐3	☐4
ST034Q03TA	I feel like I belong at school.	☐1	☐2	☐3	☐4
ST034Q04TA	I feel awkward and out of place in my school.	☐1	☐2	☐3	☐4
ST034Q05TA	Other students seem to like me.	☐1	☐2	☐3	☐4
ST034Q06TA	I feel lonely at school.	☐1	☐2	☐3	☐4

Figure 2: Belonging Questionnaire in PISA 2015

2 Attrition from PISA to LSAY Sample

Table 1: Attrition Statistics from PISA to LSAY Sample.

Characteristic	LSAY, N = 14,082	PISA, N = 11,366	p-value
Belonging	-0.29 (-0.64, 0.49)	-0.34 (-0.70, 0.32)	<0.001
Unknown	57	1,259	
Gender			<0.001
Boy	7,249 (51%)	5,403 (48%)	
Girl	6,833 (49%)	5,963 (52%)	
Indigenous Status			<0.001
Indigenous	4,592 (33%)	8,256 (73%)	
non-Indigenous	9,490 (67%)	3,100 (27%)	
Unknown	0	10	
Immigrant Status			<0.001
Immigrant	2,938 (21%)	1,993 (19%)	
non-Immigrnat	10,916 (79%)	8,593 (81%)	
Unknown	228	780	
Place			<0.001
Provincial	5,698 (40%)	3,780 (35%)	
Urban	8,384 (60%)	7,038 (65%)	
Unknown	0	548	
SES (SD Units)	0.36 (-0.24, 0.91)	0.15 (-0.47, 0.75)	<0.001
Unknown	76	1,076	
Achievement (SD Units)	0.23 (-0.47, 0.86)	-0.22 (-0.93, 0.47)	<0.001
Unknown	0	548	
School Avg Achievement (SD Units)	0.03 (-0.28, 0.39)	-0.10 (-0.47, 0.26)	<0.001
Unknown	0	548	
School Avg. SES (SD Units)	0.26 (-0.07, 0.58)	0.14 (-0.19, 0.48)	<0.001
Unknown	0	611	

[1] Median (IQR); n (%)

[2] Wilcoxon rank sum test; Pearson's Chi-squared test

[a] This table is based on the unimputed data. The data summarises scores for participants who were in both the PISA and LSAY samples (LSAY) versus those only in the PISA sample (PISA).

3 Social Class Results

Table 2: Model Predicting NEET Status (Including Social Class).

Parameter	Odds Ratio	-95% CI	+95% CI
Intercept	0.03	0.02	0.03
School Belonging (SD Units)	0.80	0.76	0.85
Time Wave (1-Year Units)	1.23	1.18	1.28
Achievement (SD Units)	0.70	0.66	0.74
Social class: Salariat	0.76	0.67	0.87
Social class: Working	0.88	0.66	1.17
Gender (Girls)	1.21	1.09	1.34
Place (Major Urban)	1.01	0.89	1.13
Indigenous Status	1.80	1.53	2.12
Immigrant Status	1.14	1.01	1.28
School Avg. SES (SD Units)	0.66	0.55	0.78
School Avg. Achievement (SD Units)	1.22	1.05	1.43
Cohort (2015)	1.32	1.18	1.48
Random Intercept: Individual	1.23		
Random Intercept: School	0.14		

[a] Random intercepts are not in odds-ratio units. Intermediate class is reference class.

4 Generalized Estimating Equation Results

Table 3: Model Predicting NEET Status (GEE Model).

Parameter	Odds Ratio	-95% CI	+95% CI
Intercept	0.03	0.02	0.03
School Belonging (SD Units)	0.80	0.76	0.85
Time Wave (1-Year Units)	1.23	1.18	1.28
Achievement (SD Units)	0.70	0.66	0.74
Social class: Salariat	0.76	0.67	0.87
Social class: Working	0.88	0.66	1.17
Gender (Girls)	1.21	1.09	1.34
Place (Major Urban)	1.01	0.89	1.13
Indigenous Status	1.80	1.53	2.12
Immigrant Status	1.14	1.01	1.28
School Avg. SES (SD Units)	0.66	0.55	0.78
School Avg. Achievement (SD Units)	1.22	1.05	1.43
Cohort (2015)	1.32	1.18	1.48
Random Intercept: Individual	1.23		
Random Intercept: School	0.14		

[a] Random intercepts are not in odds-ratio units.

5 School Context: Average Achievement

Table 4: Model Predicting NEET (School Average Achievement).

Parameter	Odds Ratio	-95% CI	+95% CI
Intercept	0.02	0.02	0.03
School Belonging (SD Units)	0.81	0.77	0.85
Time Wave (1-Year Units)	1.23	1.18	1.28
Achievement (SD Units)	0.72	0.68	0.76
SES (SD Units)	0.81	0.76	0.87
Gender (Girls)	1.21	1.09	1.34
Place (Major Urban)	0.98	0.87	1.11
Indigenous Status	1.78	1.51	2.10
Immigrant Status	1.15	1.02	1.30
School Avg. Achievement (SD Units)	1.01	0.89	1.14
Cohort (2015)	1.33	1.19	1.49
Random Intercept: Individual	1.22		
Random Intercept: School	0.15		

[a] Random intercepts are not in odds-ratio units.

6 School Context: Average Achievement

Table 5: Model Predicting NEET (School Average SES).

Parameter	Odds Ratio	-95% CI	+95% CI
Intercept	0.02	0.02	0.03
School Belonging (SD Units)	0.81	0.77	0.85
Time Wave (1-Year Units)	1.23	1.18	1.28
Achievement (SD Units)	0.73	0.69	0.77
SES (SD Units)	0.85	0.79	0.91
Gender (Girls)	1.21	1.09	1.34
Place (Major Urban)	1.01	0.89	1.14
Indigenous Status	1.77	1.50	2.08
Immigrant Status	1.14	1.01	1.29
School Avg. SES (SD Units)	0.82	0.71	0.95
Cohort (2015)	1.34	1.19	1.50
Random Intercept: Individual	1.22		
Random Intercept: School	0.14		

[a] Random intercepts are not in odds-ratio units.

7 Predicting School Graduation

Table 6: Model Predicting High-School Graduation Status.

Parameter	Odds Ratio	-95% CI	+95% CI
Intercept	2.71	2.51	2.93
Achievement (SD Units)	1.48	1.41	1.56
SES (SD Units)	1.12	1.06	1.19
Gender (Girls)	1.24	1.15	1.34
Place (Major Urban)	1.23	1.13	1.33
Indigenous Status	0.98	0.84	1.13
Immigrant Status	1.36	1.23	1.51
School Belonging (SD Units)	1.05	1.01	1.09
Cohort (2015)	1.89	1.69	2.11
School Avg. SES (SD Units)	1.08	0.93	1.25
School Avg. Achievement (SD Units)	1.06	0.94	1.20
Random Intercept: School	0.02		

[a] Random intercepts are not in odds-ratio units.

8 Unemployment Rate

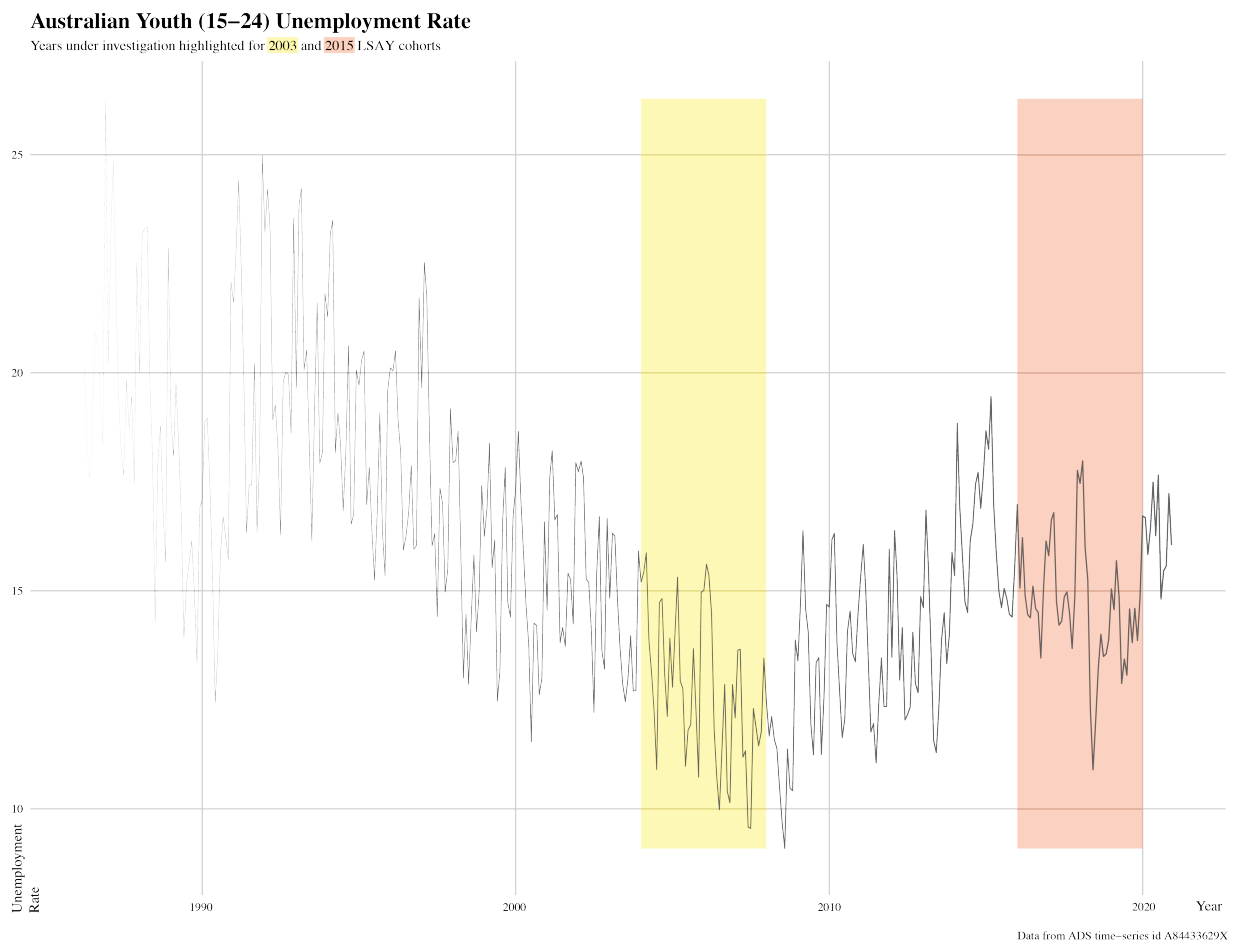**Australian Youth (15–24) Unemployment Rate**

Years under investigation highlighted for 2003 and 2015 LSAY cohorts

Figure 3: Unemployment time series