

Investigating the autism and ADHD prevalence in Chile through
Bayesian prevalence analysis and clinical record data linkage

Student 5526

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This dissertation is submitted for the degree of Master of Philosophy. The dissertation does not exceed the word limit for the respective Degree Committee. Word count: xxx TODO

1 Abstract

TODO

2 Declaration

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except where specifically indicated in the text.

USN: xxxxx July, 2022

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3 Introduction

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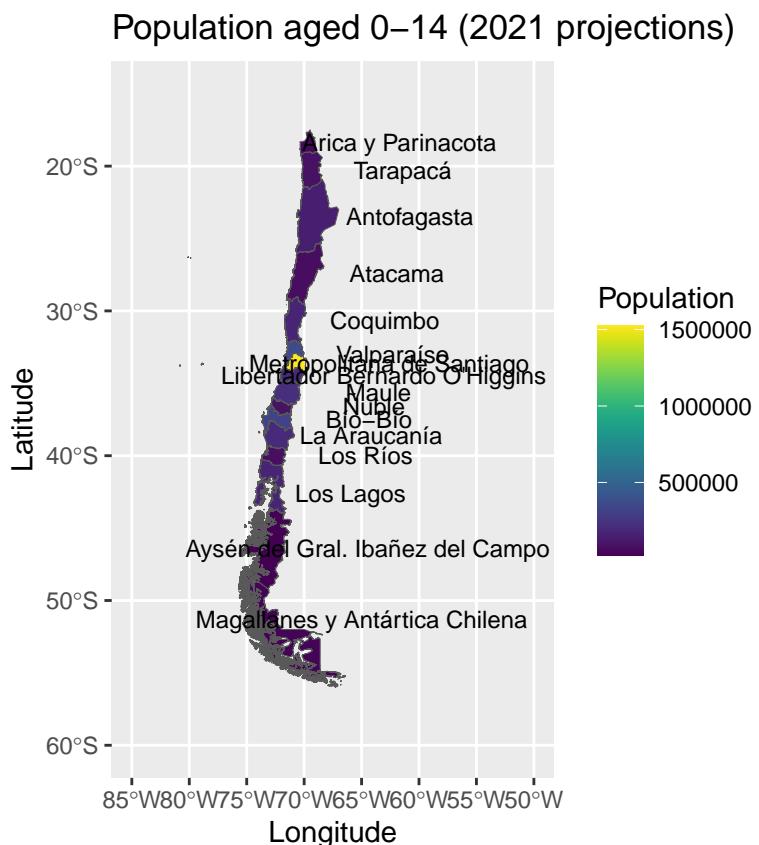


Figure 1: Population of 0-14 year olds in Chile in 2021 by region, from 2017 census projections.

4 Methods

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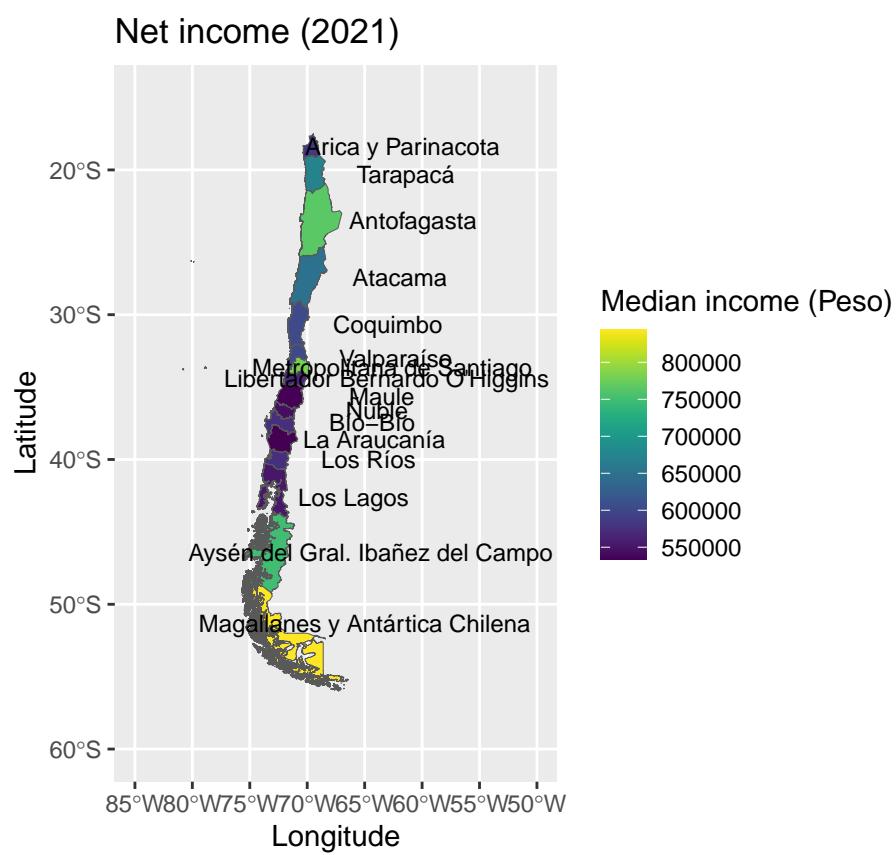


Figure 2: Net income from main job in Chile in 2021 by region, from the INE's Supplementary Income Survey.

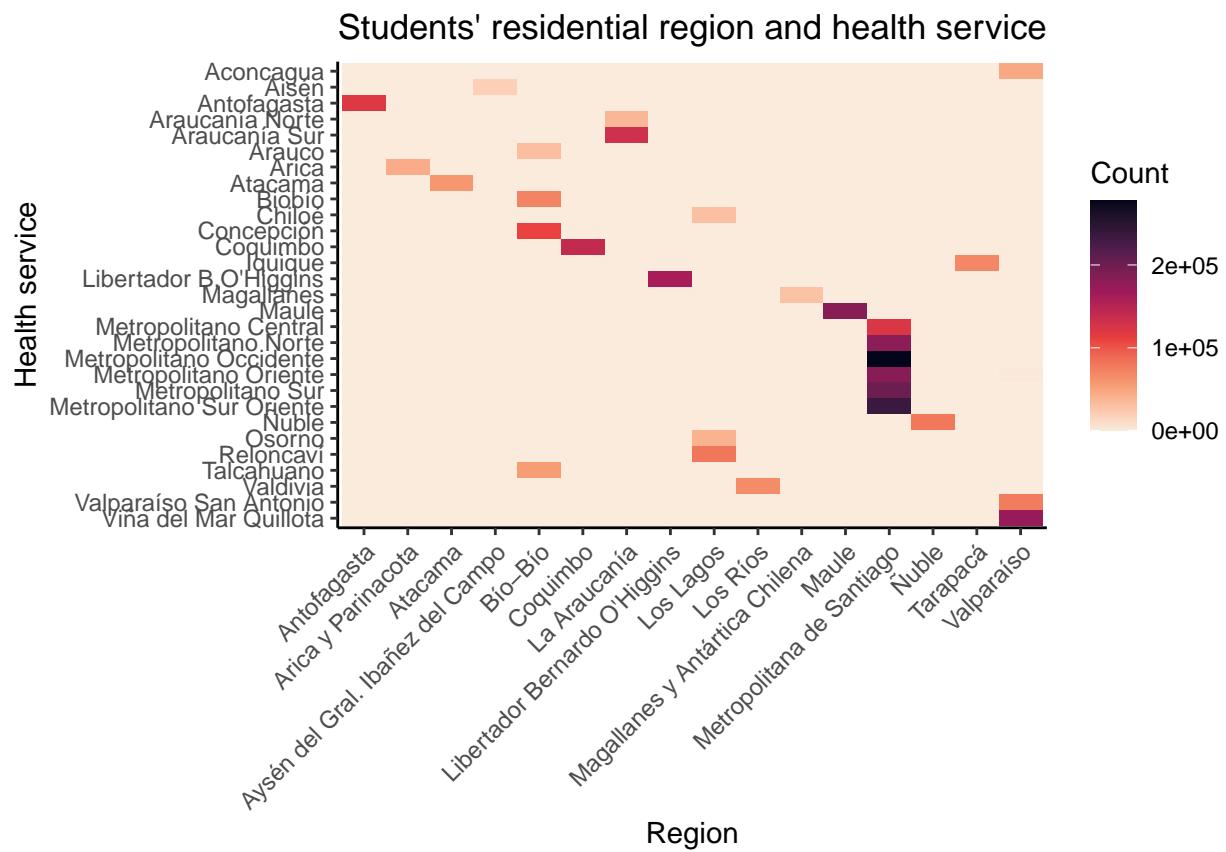


Figure 3: Residential communes aggregated to region level and the health services associated with the aggregated communes, with counts of the number of students resident in the communes in each health service's catchment area.

Communes in La Araucanía

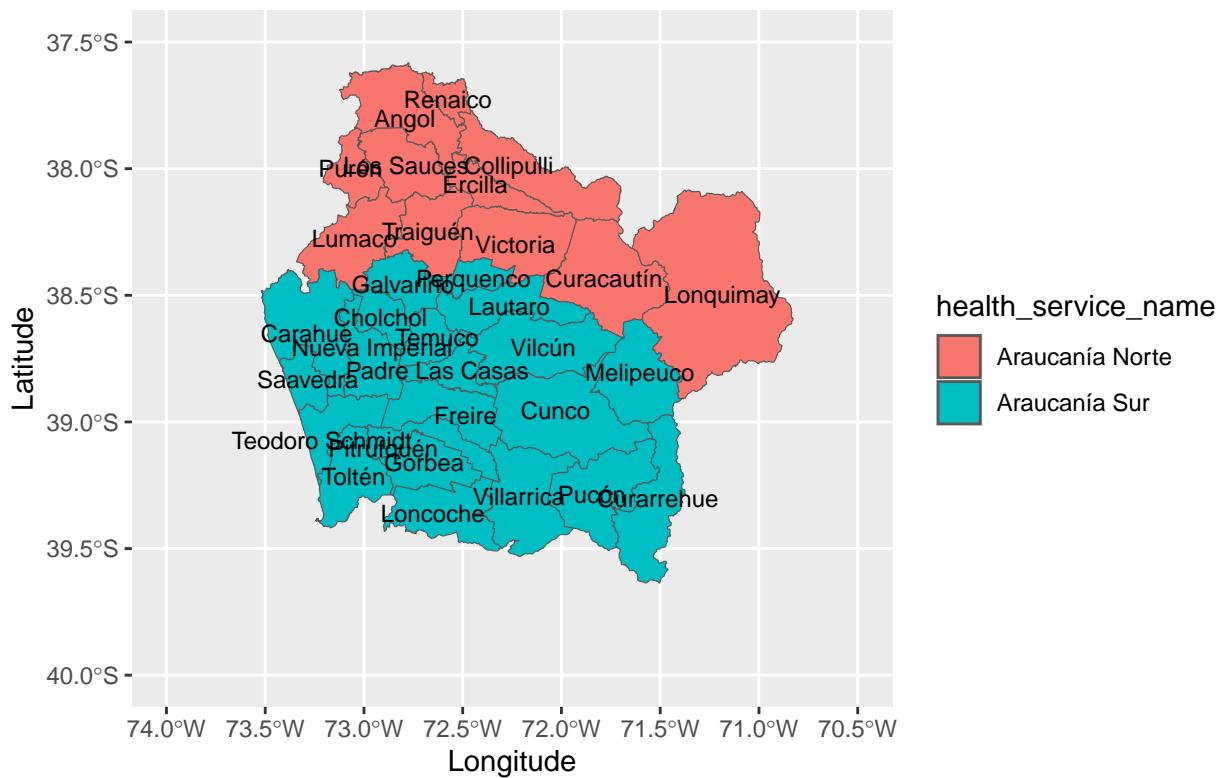


Figure 4: Communes in the Araucanía region, coloured red for the Araucanía Norte (north Araucanía) health services and blue for the Araucanía Sur (south Araucanía) health service.

Table 1: Count and prevalence of autism cases by age in Chile school data with normal confidence intervals.

Age	Autism cases	Prevalence % (95% CI)
6	1806	0.72 (0.69, 0.75)
7	1724	0.69 (0.66, 0.72)
8	1632	0.66 (0.63, 0.69)
9	1523	0.60 (0.57, 0.63)
10	1435	0.56 (0.53, 0.58)
11	1254	0.49 (0.46, 0.52)
12	1176	0.46 (0.43, 0.48)
13	1057	0.42 (0.40, 0.45)
14	805	0.33 (0.31, 0.36)
15	680	0.29 (0.27, 0.31)
16	665	0.28 (0.26, 0.30)
17	491	0.21 (0.19, 0.23)
18	301	0.34 (0.30, 0.38)

5 Results

5.1 School data

The school dataset contained records for 3,056,306 Chilean students aged 6-18 in 2021. Of these, 1,487,224 (48.66%) were female and the rest were male. A special needs code was recorded for 339,968 (11.12%) students, indicating they received SEED during that school year. Of these students, 14,549 (4.28%) received SEED for autism and 46,224 (13.6%) received SEED for ADHD. Thus the global crude prevalence of autism in the school data was 0.476% (0.468-0.484%) and the global crude prevalence of ADHD was 1.51% (1.50-1.53%).

Tables @ref(tab:prevAgeAutTable) and @ref(tab:prevAgeAdhdTable) and Supplementary Figure x show the crude prevalences of autism and ADHD by age and Figure 5 shows these by 2-year age band. Autism prevalence is highest in the youngest ages and decreases with age while ADHD prevalence peaks at age 11 then decreases. Both conditions show a small increase in prevalence for age 18.

Tables 3 and 4 and figure 6 show prevalence by sex. Autism prevalence is 0.133% (0.127-0.139%) for females and 0.80% (0.79-0.82%) for males. ADHD prevalence is 1.01% (1.00-1.03%) for females and 1.98% (1.96-2.01%) for males. Autism and ADHD prevalences are higher in males than females for all ages.

Autism varies by health service, as shown in Table 5 and Figure 7. Autism prevalence is highest in Ñuble at 1.32% (1.24 - 1.40%) and Antofagasta at 0.84% (0.79- 0.89%), and is lowest in Metropolitano Norte at 0.29% (0.27 - 0.32%) and Araucanía Norte at 0.30% (0.24- 0.36%). Autism peaks in the 6-8 age band across all services except Chiloé and Magallanes where it peaks in the 9-11 band.

ADHD prevalence also varies across health services, as shown in Table 6 and Figure 8. ADHD prevalence is highest in Magallanes at 3.07% (2.87 - 3.27%) and Talcahuano at 3.07% (2.93- 3.22%), and is lowest in Atacama at 0.49% (0.44 - 0.55%) and Antofagasta at 1.00% (0.94- 1.06%).

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals.

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Aconcagua	6	4	0.21 (0.00, 0.41)	23	1.14 (0.68, 1.61)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Aisén	6	5	0.71 (0.09, 1.33)	12	1.63 (0.72, 2.55)
Antofagasta	6	17	0.38 (0.20, 0.56)	108	2.31 (1.88, 2.74)
Araucanía Norte	6	1	0.08 (0.00, 0.22)	15	0.99 (0.49, 1.50)
Araucanía Sur	6	9	0.17 (0.06, 0.28)	46	0.88 (0.63, 1.14)
Arauco	6	6	0.50 (0.10, 0.90)	26	2.14 (1.33, 2.96)
Arica	6	11	0.63 (0.26, 1.01)	33	1.77 (1.17, 2.37)
Atacama	6	8	0.36 (0.11, 0.61)	15	0.67 (0.33, 1.00)
Biobío	6	6	0.22 (0.04, 0.39)	33	1.16 (0.77, 1.56)
Chiloé	6	1	0.09 (0.00, 0.27)	10	0.86 (0.33, 1.39)
Concepción	6	13	0.29 (0.13, 0.45)	82	1.81 (1.42, 2.20)
Coquimbo	6	16	0.29 (0.15, 0.43)	74	1.26 (0.98, 1.55)
Iquique	6	7	0.26 (0.07, 0.45)	45	1.53 (1.09, 1.98)
Libertador B.O'Higgins	6	8	0.13 (0.04, 0.22)	69	1.04 (0.80, 1.28)
Magallanes	6	1	0.10 (0.00, 0.29)	11	1.04 (0.43, 1.66)
Maule	6	15	0.21 (0.10, 0.31)	75	0.98 (0.76, 1.20)
Metropolitano Central	6	6	0.13 (0.03, 0.24)	55	1.14 (0.84, 1.43)
Metropolitano Norte	6	11	0.15 (0.06, 0.25)	56	0.77 (0.57, 0.97)
Metropolitano Occidente	6	32	0.20 (0.13, 0.26)	141	0.85 (0.71, 0.98)
Metropolitano Oriente	6	7	0.10 (0.03, 0.17)	52	0.72 (0.52, 0.91)
Metropolitano Sur	6	18	0.23 (0.12, 0.34)	91	1.10 (0.87, 1.32)
Metropolitano Sur Oriente	6	14	0.16 (0.08, 0.25)	73	0.79 (0.61, 0.97)
Osorno	6	4	0.29 (0.01, 0.57)	20	1.35 (0.76, 1.93)
Reloncaví	6	9	0.30 (0.11, 0.50)	30	0.98 (0.63, 1.33)
Talcahuano	6	15	0.73 (0.36, 1.10)	48	2.19 (1.58, 2.81)
Valdivia	6	3	0.12 (0.00, 0.27)	22	0.89 (0.52, 1.26)
Valparaíso San Antonio	6	8	0.26 (0.08, 0.44)	48	1.51 (1.09, 1.94)
Viña del Mar Quillota	6	23	0.34 (0.20, 0.48)	94	1.34 (1.07, 1.61)
Ñuble	6	16	0.53 (0.27, 0.79)	105	3.37 (2.73, 4.00)
Aconcagua	7	5	0.27 (0.03, 0.50)	19	0.93 (0.52, 1.35)
Aisén	7	4	0.51 (0.01, 1.00)	17	2.26 (1.20, 3.32)
Antofagasta	7	18	0.39 (0.21, 0.58)	98	2.01 (1.62, 2.40)
Araucanía Norte	7	2	0.14 (0.00, 0.33)	6	0.38 (0.08, 0.68)
Araucanía Sur	7	5	0.10 (0.01, 0.18)	45	0.83 (0.59, 1.07)
Arauco	7	3	0.23 (0.00, 0.49)	19	1.47 (0.81, 2.13)
Arica	7	3	0.17 (0.00, 0.36)	33	1.68 (1.11, 2.25)
Atacama	7	8	0.34 (0.10, 0.58)	22	0.92 (0.54, 1.31)
Biobío	7	2	0.07 (0.00, 0.17)	30	1.00 (0.64, 1.35)
Chiloé	7	0	0.00 (0.00, 0.00)	14	1.20 (0.57, 1.82)
Concepción	7	14	0.33 (0.16, 0.50)	99	2.20 (1.77, 2.63)
Coquimbo	7	9	0.16 (0.05, 0.26)	78	1.28 (1.00, 1.56)
Iquique	7	4	0.14 (0.00, 0.28)	31	1.03 (0.67, 1.38)
Libertador B.O'Higgins	7	16	0.25 (0.13, 0.37)	61	0.91 (0.69, 1.14)
Magallanes	7	2	0.19 (0.00, 0.45)	16	1.44 (0.74, 2.14)
Maule	7	12	0.16 (0.07, 0.26)	71	0.90 (0.69, 1.11)
Metropolitano Central	7	9	0.19 (0.07, 0.32)	42	0.81 (0.56, 1.05)
Metropolitano Norte	7	6	0.08 (0.02, 0.15)	62	0.80 (0.60, 1.00)
Metropolitano Occidente	7	15	0.13 (0.07, 0.20)	87	0.73 (0.57, 0.88)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Metropolitano Oriente	7	11	0.15 (0.06, 0.23)	57	0.74 (0.55, 0.94)
Metropolitano Sur	7	16	0.20 (0.10, 0.29)	85	1.01 (0.79, 1.22)
Metropolitano Sur Oriente	7	12	0.13 (0.06, 0.20)	108	1.08 (0.88, 1.28)
Osorno	7	2	0.13 (0.00, 0.32)	13	0.80 (0.37, 1.23)
Reloncaví	7	7	0.23 (0.06, 0.39)	44	1.36 (0.96, 1.77)
Talcahuano	7	6	0.28 (0.06, 0.50)	40	1.76 (1.22, 2.29)
Valdivia	7	4	0.16 (0.00, 0.31)	24	0.88 (0.53, 1.23)
Valparaíso San Antonio	7	11	0.34 (0.14, 0.54)	62	1.87 (1.41, 2.33)
Viña del Mar Quillota	7	15	0.22 (0.11, 0.33)	99	1.37 (1.11, 1.64)
Ñuble	7	20	0.66 (0.37, 0.95)	101	3.06 (2.47, 3.65)
Aconcagua	8	5	0.27 (0.03, 0.52)	17	0.88 (0.46, 1.30)
Aisén	8	0	0.00 (0.00, 0.00)	23	2.93 (1.75, 4.10)
Antofagasta	8	19	0.40 (0.22, 0.58)	96	1.95 (1.56, 2.33)
Araucanía Norte	8	0	0.00 (0.00, 0.00)	11	0.73 (0.30, 1.16)
Araucanía Sur	8	12	0.23 (0.10, 0.36)	48	0.87 (0.62, 1.11)
Arauco	8	2	0.16 (0.00, 0.38)	22	1.78 (1.04, 2.51)
Arica	8	4	0.22 (0.00, 0.44)	28	1.46 (0.92, 1.99)
Atacama	8	2	0.09 (0.00, 0.21)	16	0.65 (0.33, 0.97)
Biobío	8	4	0.14 (0.00, 0.28)	29	1.03 (0.66, 1.40)
Chiloé	8	1	0.09 (0.00, 0.27)	14	1.16 (0.55, 1.76)
Concepción	8	17	0.39 (0.20, 0.57)	71	1.59 (1.22, 1.95)
Coquimbo	8	11	0.19 (0.08, 0.30)	55	0.89 (0.65, 1.12)
Iquique	8	4	0.14 (0.00, 0.29)	24	0.79 (0.47, 1.10)
Libertador B.O'Higgins	8	14	0.22 (0.10, 0.33)	85	1.29 (1.02, 1.56)
Magallanes	8	3	0.29 (0.00, 0.62)	15	1.42 (0.71, 2.14)
Maule	8	14	0.19 (0.09, 0.29)	47	0.63 (0.45, 0.81)
Metropolitano Central	8	7	0.15 (0.04, 0.26)	65	1.27 (0.96, 1.58)
Metropolitano Norte	8	9	0.12 (0.04, 0.21)	56	0.73 (0.54, 0.93)
Metropolitano Occidente	8	15	0.14 (0.07, 0.21)	95	0.84 (0.67, 1.01)
Metropolitano Oriente	8	13	0.18 (0.08, 0.27)	46	0.61 (0.43, 0.78)
Metropolitano Sur	8	10	0.13 (0.05, 0.20)	85	1.01 (0.80, 1.23)
Metropolitano Sur Oriente	8	15	0.16 (0.08, 0.25)	96	0.98 (0.79, 1.18)
Osorno	8	3	0.18 (0.00, 0.39)	18	1.11 (0.60, 1.62)
Reloncaví	8	6	0.20 (0.04, 0.35)	22	0.71 (0.42, 1.01)
Talcahuano	8	4	0.19 (0.00, 0.38)	41	1.94 (1.35, 2.53)
Valdivia	8	4	0.15 (0.00, 0.30)	25	0.91 (0.56, 1.27)
Valparaíso San Antonio	8	3	0.10 (0.00, 0.21)	45	1.39 (0.98, 1.79)
Viña del Mar Quillota	8	17	0.25 (0.13, 0.37)	99	1.38 (1.11, 1.65)
Ñuble	8	21	0.69 (0.39, 0.98)	99	3.20 (2.58, 3.82)
Aconcagua	9	3	0.15 (0.00, 0.32)	25	1.19 (0.73, 1.65)
Aisén	9	2	0.28 (0.00, 0.66)	9	1.11 (0.39, 1.84)
Antofagasta	9	19	0.40 (0.22, 0.58)	82	1.62 (1.27, 1.97)
Araucanía Norte	9	2	0.13 (0.00, 0.32)	11	0.70 (0.29, 1.12)
Araucanía Sur	9	9	0.17 (0.06, 0.28)	41	0.75 (0.52, 0.97)
Arauco	9	2	0.16 (0.00, 0.38)	21	1.61 (0.93, 2.30)
Arica	9	6	0.33 (0.07, 0.59)	18	0.90 (0.49, 1.32)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Atacama	9	3	0.12 (0.00, 0.26)	22	0.90 (0.53, 1.28)
Biobío	9	9	0.31 (0.11, 0.52)	24	0.83 (0.50, 1.16)
Chiloé	9	0	0.00 (0.00, 0.00)	18	1.39 (0.75, 2.03)
Concepción	9	12	0.27 (0.12, 0.42)	75	1.60 (1.24, 1.96)
Coquimbo	9	6	0.10 (0.02, 0.18)	50	0.82 (0.59, 1.04)
Iquique	9	5	0.18 (0.02, 0.34)	33	1.04 (0.69, 1.39)
Libertador B.O'Higgins	9	9	0.14 (0.05, 0.23)	70	1.02 (0.78, 1.26)
Magallanes	9	0	0.00 (0.00, 0.00)	21	1.93 (1.11, 2.75)
Maule	9	10	0.14 (0.05, 0.23)	55	0.74 (0.54, 0.93)
Metropolitano Central	9	10	0.20 (0.08, 0.33)	52	0.99 (0.72, 1.26)
Metropolitano Norte	9	6	0.08 (0.02, 0.15)	41	0.52 (0.36, 0.68)
Metropolitano Occidente	9	9	0.08 (0.03, 0.14)	93	0.80 (0.64, 0.96)
Metropolitano Oriente	9	9	0.12 (0.04, 0.20)	50	0.65 (0.47, 0.82)
Metropolitano Sur	9	7	0.08 (0.02, 0.14)	82	0.94 (0.74, 1.14)
Metropolitano Sur Oriente	9	5	0.05 (0.01, 0.10)	73	0.74 (0.57, 0.91)
Osorno	9	1	0.06 (0.00, 0.19)	18	1.05 (0.57, 1.53)
Reloncaví	9	3	0.10 (0.00, 0.21)	24	0.75 (0.45, 1.04)
Talcahuano	9	9	0.40 (0.14, 0.67)	46	1.91 (1.36, 2.46)
Valdivia	9	2	0.07 (0.00, 0.18)	13	0.48 (0.22, 0.73)
Valparaíso San Antonio	9	6	0.19 (0.04, 0.34)	52	1.57 (1.15, 1.99)
Viña del Mar Quillota	9	22	0.31 (0.18, 0.43)	107	1.45 (1.18, 1.73)
Ñuble	9	12	0.39 (0.17, 0.60)	99	3.04 (2.45, 3.63)
Aconcagua	10	0	0.00 (0.00, 0.00)	24	1.16 (0.70, 1.62)
Aisén	10	0	0.00 (0.00, 0.00)	9	1.05 (0.37, 1.74)
Antofagasta	10	11	0.22 (0.09, 0.35)	93	1.77 (1.41, 2.13)
Araucanía Norte	10	1	0.07 (0.00, 0.20)	10	0.67 (0.26, 1.08)
Araucanía Sur	10	1	0.02 (0.00, 0.05)	47	0.81 (0.58, 1.04)
Arauco	10	4	0.30 (0.01, 0.59)	23	1.68 (1.00, 2.36)
Arica	10	4	0.21 (0.00, 0.41)	20	0.98 (0.55, 1.41)
Atacama	10	1	0.04 (0.00, 0.12)	13	0.49 (0.23, 0.76)
Biobío	10	2	0.07 (0.00, 0.17)	25	0.84 (0.51, 1.17)
Chiloé	10	0	0.00 (0.00, 0.00)	15	1.20 (0.60, 1.81)
Concepción	10	10	0.21 (0.08, 0.33)	83	1.63 (1.29, 1.98)
Coquimbo	10	4	0.07 (0.00, 0.13)	57	0.90 (0.67, 1.14)
Iquique	10	5	0.17 (0.02, 0.32)	22	0.72 (0.42, 1.01)
Libertador B.O'Higgins	10	9	0.14 (0.05, 0.22)	65	0.94 (0.71, 1.16)
Magallanes	10	4	0.36 (0.01, 0.70)	18	1.51 (0.82, 2.20)
Maule	10	4	0.05 (0.00, 0.11)	53	0.66 (0.49, 0.84)
Metropolitano Central	10	3	0.06 (0.00, 0.13)	45	0.86 (0.61, 1.11)
Metropolitano Norte	10	6	0.08 (0.02, 0.15)	63	0.80 (0.60, 1.00)
Metropolitano Occidente	10	10	0.09 (0.04, 0.15)	69	0.59 (0.45, 0.73)
Metropolitano Oriente	10	6	0.08 (0.02, 0.14)	37	0.46 (0.31, 0.61)
Metropolitano Sur	10	18	0.22 (0.12, 0.32)	83	0.95 (0.75, 1.15)
Metropolitano Sur Oriente	10	11	0.11 (0.05, 0.18)	63	0.62 (0.47, 0.77)
Osorno	10	2	0.12 (0.00, 0.28)	18	1.05 (0.57, 1.53)
Reloncaví	10	4	0.12 (0.00, 0.24)	26	0.75 (0.46, 1.03)
Talcahuano	10	10	0.45 (0.17, 0.73)	45	1.94 (1.38, 2.50)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Valdivia	10	1	0.04 (0.00, 0.11)	13	0.46 (0.21, 0.72)
Valparaíso San Antonio	10	6	0.19 (0.04, 0.34)	32	0.99 (0.65, 1.34)
Viña del Mar Quillota	10	10	0.14 (0.05, 0.23)	106	1.43 (1.16, 1.70)
Ñuble	10	15	0.47 (0.23, 0.70)	96	2.91 (2.34, 3.49)
Aconcagua	11	0	0.00 (0.00, 0.00)	10	0.50 (0.19, 0.81)
Aisén	11	0	0.00 (0.00, 0.00)	8	0.98 (0.30, 1.66)
Antofagasta	11	15	0.30 (0.15, 0.44)	85	1.61 (1.27, 1.95)
Araucanía Norte	11	1	0.07 (0.00, 0.21)	5	0.33 (0.04, 0.63)
Araucanía Sur	11	6	0.11 (0.02, 0.20)	32	0.57 (0.37, 0.76)
Arauco	11	3	0.23 (0.00, 0.49)	26	1.88 (1.17, 2.60)
Arica	11	1	0.05 (0.00, 0.16)	19	0.97 (0.53, 1.40)
Atacama	11	3	0.12 (0.00, 0.25)	10	0.38 (0.15, 0.62)
Biobío	11	5	0.17 (0.02, 0.32)	19	0.61 (0.34, 0.89)
Chiloé	11	2	0.16 (0.00, 0.39)	16	1.22 (0.63, 1.82)
Concepción	11	8	0.18 (0.05, 0.30)	58	1.22 (0.91, 1.54)
Coquimbo	11	8	0.13 (0.04, 0.22)	38	0.61 (0.42, 0.81)
Iquique	11	6	0.21 (0.04, 0.38)	25	0.81 (0.49, 1.12)
Libertador B.O'Higgins	11	12	0.18 (0.08, 0.28)	58	0.82 (0.61, 1.03)
Magallanes	11	2	0.17 (0.00, 0.40)	21	1.77 (1.02, 2.53)
Maule	11	2	0.03 (0.00, 0.06)	32	0.41 (0.27, 0.55)
Metropolitano Central	11	4	0.08 (0.00, 0.16)	39	0.73 (0.50, 0.96)
Metropolitano Norte	11	4	0.05 (0.00, 0.11)	43	0.55 (0.38, 0.71)
Metropolitano Occidente	11	9	0.08 (0.03, 0.14)	72	0.64 (0.49, 0.78)
Metropolitano Oriente	11	9	0.12 (0.04, 0.20)	44	0.57 (0.40, 0.73)
Metropolitano Sur	11	13	0.16 (0.07, 0.24)	73	0.82 (0.63, 1.00)
Metropolitano Sur Oriente	11	8	0.08 (0.03, 0.14)	55	0.55 (0.40, 0.69)
Osorno	11	3	0.18 (0.00, 0.39)	18	1.05 (0.57, 1.53)
Reloncaví	11	2	0.06 (0.00, 0.14)	31	0.89 (0.58, 1.20)
Talcahuano	11	6	0.28 (0.06, 0.49)	41	1.75 (1.22, 2.29)
Valdivia	11	1	0.04 (0.00, 0.11)	12	0.41 (0.18, 0.64)
Valparaíso San Antonio	11	3	0.10 (0.00, 0.20)	36	1.12 (0.75, 1.48)
Viña del Mar Quillota	11	15	0.21 (0.10, 0.32)	81	1.09 (0.86, 1.33)
Ñuble	11	12	0.37 (0.16, 0.58)	84	2.53 (1.99, 3.06)
Aconcagua	12	2	0.10 (0.00, 0.24)	16	0.84 (0.43, 1.25)
Aisén	12	3	0.34 (0.00, 0.72)	9	0.98 (0.34, 1.61)
Antofagasta	12	6	0.12 (0.02, 0.22)	74	1.38 (1.07, 1.70)
Araucanía Norte	12	3	0.20 (0.00, 0.42)	6	0.37 (0.08, 0.67)
Araucanía Sur	12	4	0.07 (0.00, 0.14)	31	0.55 (0.35, 0.74)
Arauco	12	4	0.32 (0.01, 0.64)	20	1.49 (0.84, 2.14)
Arica	12	2	0.11 (0.00, 0.26)	13	0.67 (0.31, 1.04)
Atacama	12	1	0.04 (0.00, 0.12)	16	0.63 (0.32, 0.94)
Biobío	12	2	0.07 (0.00, 0.16)	22	0.71 (0.41, 1.00)
Chiloé	12	1	0.08 (0.00, 0.23)	11	0.78 (0.32, 1.23)
Concepción	12	9	0.21 (0.07, 0.34)	60	1.32 (0.99, 1.65)
Coquimbo	12	10	0.17 (0.06, 0.27)	33	0.54 (0.36, 0.73)
Iquique	12	1	0.04 (0.00, 0.10)	19	0.61 (0.34, 0.88)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Libertador B.O'Higgins	12	6	0.09 (0.02, 0.16)	47	0.67 (0.48, 0.86)
Magallanes	12	3	0.26 (0.00, 0.54)	16	1.34 (0.69, 2.00)
Maule	12	5	0.07 (0.01, 0.12)	25	0.31 (0.19, 0.44)
Metropolitano Central	12	2	0.04 (0.00, 0.10)	40	0.76 (0.53, 1.00)
Metropolitano Norte	12	5	0.07 (0.01, 0.13)	28	0.35 (0.22, 0.48)
Metropolitano Occidente	12	9	0.08 (0.03, 0.14)	78	0.68 (0.53, 0.83)
Metropolitano Oriente	12	6	0.08 (0.02, 0.14)	49	0.64 (0.46, 0.81)
Metropolitano Sur	12	6	0.07 (0.01, 0.13)	57	0.64 (0.48, 0.81)
Metropolitano Sur Oriente	12	10	0.10 (0.04, 0.17)	70	0.68 (0.52, 0.84)
Osorno	12	1	0.06 (0.00, 0.17)	9	0.51 (0.18, 0.84)
Reloncaví	12	8	0.24 (0.07, 0.40)	19	0.55 (0.30, 0.80)
Talcahuano	12	0	0.00 (0.00, 0.00)	38	1.57 (1.08, 2.07)
Valdivia	12	1	0.04 (0.00, 0.11)	15	0.52 (0.26, 0.78)
Valparaíso San Antonio	12	5	0.16 (0.02, 0.30)	50	1.54 (1.12, 1.96)
Viña del Mar Quillota	12	9	0.13 (0.04, 0.21)	89	1.21 (0.96, 1.46)
Ñuble	12	10	0.30 (0.11, 0.48)	82	2.37 (1.86, 2.88)
Aconcagua	13	3	0.16 (0.00, 0.35)	12	0.63 (0.27, 0.98)
Aisén	13	1	0.13 (0.00, 0.37)	12	1.38 (0.61, 2.16)
Antofagasta	13	11	0.23 (0.09, 0.36)	54	1.05 (0.77, 1.32)
Araucanía Norte	13	0	0.00 (0.00, 0.00)	10	0.61 (0.23, 0.99)
Araucanía Sur	13	4	0.08 (0.00, 0.15)	33	0.59 (0.39, 0.79)
Arauco	13	0	0.00 (0.00, 0.00)	16	1.27 (0.65, 1.89)
Arica	13	3	0.17 (0.00, 0.36)	13	0.71 (0.33, 1.10)
Atacama	13	2	0.08 (0.00, 0.20)	8	0.32 (0.10, 0.54)
Biobío	13	1	0.03 (0.00, 0.10)	18	0.61 (0.33, 0.89)
Chiloé	13	0	0.00 (0.00, 0.00)	12	0.89 (0.39, 1.39)
Concepción	13	10	0.23 (0.09, 0.37)	48	1.06 (0.76, 1.36)
Coquimbo	13	2	0.04 (0.00, 0.09)	35	0.62 (0.41, 0.82)
Iquique	13	3	0.11 (0.00, 0.24)	11	0.37 (0.15, 0.59)
Libertador B.O'Higgins	13	11	0.16 (0.07, 0.26)	39	0.57 (0.39, 0.75)
Magallanes	13	3	0.26 (0.00, 0.55)	25	2.12 (1.29, 2.94)
Maule	13	6	0.08 (0.02, 0.15)	35	0.46 (0.30, 0.61)
Metropolitano Central	13	3	0.06 (0.00, 0.13)	32	0.61 (0.40, 0.81)
Metropolitano Norte	13	6	0.08 (0.02, 0.15)	25	0.33 (0.20, 0.46)
Metropolitano Occidente	13	7	0.07 (0.02, 0.12)	54	0.49 (0.36, 0.62)
Metropolitano Oriente	13	10	0.14 (0.05, 0.22)	43	0.57 (0.40, 0.74)
Metropolitano Sur	13	10	0.12 (0.05, 0.20)	55	0.65 (0.48, 0.82)
Metropolitano Sur Oriente	13	4	0.04 (0.00, 0.08)	59	0.59 (0.44, 0.73)
Osorno	13	3	0.18 (0.00, 0.38)	6	0.35 (0.07, 0.63)
Reloncaví	13	2	0.06 (0.00, 0.15)	28	0.80 (0.50, 1.09)
Talcahuano	13	7	0.32 (0.08, 0.56)	34	1.42 (0.94, 1.89)
Valdivia	13	1	0.04 (0.00, 0.11)	12	0.42 (0.18, 0.66)
Valparaíso San Antonio	13	6	0.20 (0.04, 0.36)	33	1.04 (0.69, 1.39)
Viña del Mar Quillota	13	11	0.16 (0.06, 0.25)	85	1.17 (0.92, 1.42)
Ñuble	13	15	0.47 (0.23, 0.70)	65	1.89 (1.44, 2.35)
Aconcagua	14	1	0.06 (0.00, 0.17)	10	0.53 (0.20, 0.85)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Aisén	14	2	0.25 (0.00, 0.60)	4	0.46 (0.01, 0.91)
Antofagasta	14	11	0.23 (0.10, 0.37)	42	0.83 (0.58, 1.08)
Araucanía Norte	14	3	0.19 (0.00, 0.41)	5	0.33 (0.04, 0.62)
Araucanía Sur	14	4	0.08 (0.00, 0.15)	30	0.56 (0.36, 0.76)
Arauco	14	1	0.08 (0.00, 0.24)	10	0.76 (0.29, 1.23)
Arica	14	5	0.31 (0.04, 0.58)	18	1.05 (0.57, 1.53)
Atacama	14	0	0.00 (0.00, 0.00)	4	0.16 (0.00, 0.32)
Biobío	14	2	0.07 (0.00, 0.17)	18	0.58 (0.31, 0.84)
Chiloé	14	0	0.00 (0.00, 0.00)	9	0.70 (0.24, 1.15)
Concepción	14	9	0.22 (0.07, 0.36)	47	1.05 (0.75, 1.35)
Coquimbo	14	2	0.04 (0.00, 0.09)	20	0.36 (0.20, 0.52)
Iquique	14	4	0.15 (0.00, 0.30)	22	0.77 (0.45, 1.10)
Libertador B.O'Higgins	14	4	0.06 (0.00, 0.13)	30	0.46 (0.30, 0.62)
Magallanes	14	1	0.09 (0.00, 0.27)	14	1.20 (0.57, 1.82)
Maule	14	5	0.07 (0.01, 0.13)	26	0.35 (0.22, 0.49)
Metropolitano Central	14	0	0.00 (0.00, 0.00)	24	0.48 (0.29, 0.67)
Metropolitano Norte	14	4	0.06 (0.00, 0.12)	25	0.35 (0.22, 0.49)
Metropolitano Occidente	14	9	0.09 (0.03, 0.15)	54	0.50 (0.37, 0.64)
Metropolitano Oriente	14	5	0.07 (0.01, 0.13)	32	0.43 (0.28, 0.58)
Metropolitano Sur	14	2	0.03 (0.00, 0.06)	25	0.30 (0.18, 0.42)
Metropolitano Sur Oriente	14	3	0.03 (0.00, 0.07)	43	0.45 (0.32, 0.58)
Osorno	14	2	0.13 (0.00, 0.31)	12	0.72 (0.31, 1.13)
Reloncaví	14	3	0.10 (0.00, 0.21)	16	0.49 (0.25, 0.72)
Talcahuano	14	4	0.18 (0.00, 0.36)	15	0.66 (0.33, 1.00)
Valdivia	14	1	0.04 (0.00, 0.11)	16	0.60 (0.30, 0.89)
Valparaíso San Antonio	14	5	0.17 (0.02, 0.32)	22	0.72 (0.42, 1.02)
Viña del Mar Quillota	14	11	0.16 (0.07, 0.26)	56	0.83 (0.61, 1.04)
Ñuble	14	9	0.28 (0.10, 0.46)	44	1.33 (0.94, 1.72)
Aconcagua	15	1	0.06 (0.00, 0.16)	7	0.40 (0.11, 0.70)
Aisén	15	3	0.39 (0.00, 0.82)	8	0.99 (0.31, 1.66)
Antofagasta	15	6	0.13 (0.03, 0.24)	36	0.75 (0.50, 0.99)
Araucanía Norte	15	0	0.00 (0.00, 0.00)	5	0.34 (0.04, 0.63)
Araucanía Sur	15	2	0.04 (0.00, 0.09)	21	0.40 (0.23, 0.57)
Arauco	15	0	0.00 (0.00, 0.00)	7	0.56 (0.15, 0.98)
Arica	15	1	0.06 (0.00, 0.18)	13	0.76 (0.35, 1.17)
Atacama	15	0	0.00 (0.00, 0.00)	8	0.35 (0.11, 0.59)
Biobío	15	0	0.00 (0.00, 0.00)	17	0.58 (0.30, 0.85)
Chiloé	15	1	0.08 (0.00, 0.22)	3	0.23 (0.00, 0.50)
Concepción	15	10	0.24 (0.09, 0.39)	36	0.82 (0.55, 1.09)
Coquimbo	15	7	0.13 (0.03, 0.23)	18	0.33 (0.18, 0.48)
Iquique	15	0	0.00 (0.00, 0.00)	16	0.58 (0.30, 0.86)
Libertador B.O'Higgins	15	1	0.02 (0.00, 0.05)	21	0.33 (0.19, 0.47)
Magallanes	15	3	0.26 (0.00, 0.56)	12	0.97 (0.42, 1.52)
Maule	15	3	0.04 (0.00, 0.09)	12	0.16 (0.07, 0.26)
Metropolitano Central	15	2	0.04 (0.00, 0.10)	25	0.51 (0.31, 0.71)
Metropolitano Norte	15	5	0.08 (0.01, 0.14)	19	0.27 (0.15, 0.40)
Metropolitano Occidente	15	6	0.06 (0.01, 0.11)	44	0.42 (0.30, 0.55)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Metropolitano Oriente	15	1	0.01 (0.00, 0.04)	24	0.34 (0.20, 0.47)
Metropolitano Sur	15	3	0.04 (0.00, 0.09)	28	0.36 (0.23, 0.49)
Metropolitano Sur Oriente	15	7	0.08 (0.02, 0.13)	37	0.39 (0.26, 0.51)
Osorno	15	0	0.00 (0.00, 0.00)	11	0.66 (0.27, 1.06)
Reloncaví	15	1	0.03 (0.00, 0.10)	17	0.52 (0.27, 0.76)
Talcahuano	15	5	0.24 (0.03, 0.46)	10	0.46 (0.17, 0.74)
Valdivia	15	1	0.04 (0.00, 0.11)	11	0.40 (0.17, 0.64)
Valparaíso San Antonio	15	6	0.20 (0.04, 0.37)	28	0.90 (0.57, 1.24)
Viña del Mar Quillota	15	11	0.17 (0.07, 0.27)	53	0.77 (0.56, 0.97)
Ñuble	15	10	0.32 (0.12, 0.52)	37	1.14 (0.78, 1.51)
Aconcagua	16	1	0.05 (0.00, 0.16)	9	0.49 (0.17, 0.81)
Aisén	16	1	0.13 (0.00, 0.38)	5	0.61 (0.08, 1.14)
Antofagasta	16	11	0.24 (0.10, 0.38)	35	0.75 (0.51, 1.00)
Araucanía Norte	16	0	0.00 (0.00, 0.00)	6	0.39 (0.08, 0.69)
Araucanía Sur	16	2	0.04 (0.00, 0.09)	22	0.42 (0.24, 0.59)
Arauco	16	0	0.00 (0.00, 0.00)	7	0.56 (0.15, 0.98)
Arica	16	1	0.06 (0.00, 0.18)	5	0.29 (0.04, 0.54)
Atacama	16	0	0.00 (0.00, 0.00)	5	0.22 (0.03, 0.41)
Biobío	16	2	0.07 (0.00, 0.17)	12	0.41 (0.18, 0.65)
Chiloé	16	0	0.00 (0.00, 0.00)	6	0.47 (0.09, 0.85)
Concepción	16	4	0.10 (0.00, 0.19)	29	0.68 (0.43, 0.92)
Coquimbo	16	3	0.06 (0.00, 0.12)	22	0.41 (0.24, 0.58)
Iquique	16	2	0.08 (0.00, 0.19)	17	0.62 (0.33, 0.92)
Libertador B.O'Higgins	16	8	0.13 (0.04, 0.22)	24	0.37 (0.22, 0.52)
Magallanes	16	9	0.81 (0.28, 1.33)	15	1.27 (0.63, 1.91)
Maule	16	6	0.09 (0.02, 0.16)	15	0.21 (0.10, 0.31)
Metropolitano Central	16	6	0.13 (0.03, 0.23)	17	0.35 (0.18, 0.51)
Metropolitano Norte	16	3	0.05 (0.00, 0.10)	16	0.23 (0.12, 0.35)
Metropolitano Occidente	16	4	0.04 (0.00, 0.08)	35	0.34 (0.23, 0.46)
Metropolitano Oriente	16	3	0.04 (0.00, 0.09)	18	0.25 (0.13, 0.36)
Metropolitano Sur	16	2	0.03 (0.00, 0.06)	24	0.32 (0.19, 0.45)
Metropolitano Sur Oriente	16	4	0.04 (0.00, 0.09)	44	0.47 (0.33, 0.60)
Osorno	16	1	0.06 (0.00, 0.19)	6	0.36 (0.07, 0.65)
Reloncaví	16	1	0.03 (0.00, 0.10)	18	0.56 (0.30, 0.81)
Talcahuano	16	0	0.00 (0.00, 0.00)	15	0.69 (0.34, 1.03)
Valdivia	16	0	0.00 (0.00, 0.00)	14	0.51 (0.24, 0.78)
Valparaíso San Antonio	16	2	0.07 (0.00, 0.16)	32	1.04 (0.68, 1.40)
Viña del Mar Quillota	16	11	0.17 (0.07, 0.28)	62	0.91 (0.68, 1.13)
Ñuble	16	13	0.41 (0.19, 0.64)	30	0.91 (0.58, 1.23)
Aconcagua	17	0	0.00 (0.00, 0.00)	4	0.22 (0.00, 0.44)
Aisén	17	1	0.13 (0.00, 0.40)	6	0.77 (0.16, 1.39)
Antofagasta	17	5	0.11 (0.01, 0.21)	33	0.71 (0.47, 0.95)
Araucanía Norte	17	1	0.07 (0.00, 0.21)	2	0.15 (0.00, 0.35)
Araucanía Sur	17	1	0.02 (0.00, 0.06)	16	0.31 (0.16, 0.46)
Arauco	17	0	0.00 (0.00, 0.00)	4	0.32 (0.01, 0.64)
Arica	17	2	0.12 (0.00, 0.28)	8	0.46 (0.14, 0.79)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Atacama	17	1	0.05 (0.00, 0.14)	6	0.27 (0.05, 0.48)
Biobío	17	4	0.14 (0.00, 0.28)	18	0.63 (0.34, 0.93)
Chiloé	17	0	0.00 (0.00, 0.00)	5	0.38 (0.05, 0.71)
Concepción	17	3	0.07 (0.00, 0.16)	34	0.81 (0.54, 1.08)
Coquimbo	17	0	0.00 (0.00, 0.00)	14	0.26 (0.13, 0.40)
Iquique	17	0	0.00 (0.00, 0.00)	7	0.27 (0.07, 0.47)
Libertador B.O'Higgins	17	6	0.10 (0.02, 0.18)	13	0.20 (0.09, 0.31)
Magallanes	17	1	0.09 (0.00, 0.27)	10	0.85 (0.32, 1.37)
Maule	17	1	0.01 (0.00, 0.04)	13	0.18 (0.08, 0.28)
Metropolitano Central	17	0	0.00 (0.00, 0.00)	14	0.28 (0.13, 0.42)
Metropolitano Norte	17	1	0.02 (0.00, 0.05)	15	0.22 (0.11, 0.33)
Metropolitano Occidente	17	4	0.04 (0.00, 0.08)	29	0.30 (0.19, 0.40)
Metropolitano Oriente	17	2	0.03 (0.00, 0.07)	15	0.21 (0.10, 0.31)
Metropolitano Sur	17	4	0.05 (0.00, 0.11)	22	0.29 (0.17, 0.41)
Metropolitano Sur Oriente	17	2	0.02 (0.00, 0.05)	23	0.25 (0.15, 0.35)
Osorno	17	0	0.00 (0.00, 0.00)	7	0.44 (0.11, 0.77)
Reloncaví	17	0	0.00 (0.00, 0.00)	9	0.29 (0.10, 0.47)
Talcahuano	17	3	0.14 (0.00, 0.29)	12	0.52 (0.23, 0.82)
Valdivia	17	0	0.00 (0.00, 0.00)	9	0.35 (0.12, 0.58)
Valparaíso San Antonio	17	0	0.00 (0.00, 0.00)	21	0.68 (0.39, 0.97)
Viña del Mar Quillota	17	9	0.14 (0.05, 0.23)	33	0.49 (0.32, 0.66)
Ñuble	17	4	0.13 (0.00, 0.25)	34	1.05 (0.70, 1.40)
Aconcagua	18	2	0.37 (0.00, 0.89)	2	0.28 (0.00, 0.67)
Aisén	18	0	0.00 (0.00, 0.00)	5	1.22 (0.16, 2.29)
Antofagasta	18	3	0.22 (0.00, 0.46)	16	0.93 (0.48, 1.39)
Araucanía Norte	18	0	0.00 (0.00, 0.00)	4	0.73 (0.02, 1.44)
Araucanía Sur	18	2	0.13 (0.00, 0.31)	15	0.73 (0.36, 1.10)
Arauco	18	0	0.00 (0.00, 0.00)	3	0.61 (0.00, 1.31)
Arica	18	0	0.00 (0.00, 0.00)	9	1.56 (0.55, 2.57)
Atacama	18	2	0.29 (0.00, 0.69)	4	0.45 (0.01, 0.89)
Biobío	18	0	0.00 (0.00, 0.00)	4	0.35 (0.01, 0.69)
Chiloé	18	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
Concepción	18	6	0.45 (0.09, 0.80)	12	0.72 (0.32, 1.13)
Coquimbo	18	0	0.00 (0.00, 0.00)	9	0.43 (0.15, 0.71)
Iquique	18	0	0.00 (0.00, 0.00)	4	0.39 (0.01, 0.76)
Libertador B.O'Higgins	18	1	0.06 (0.00, 0.17)	14	0.52 (0.25, 0.80)
Magallanes	18	1	0.29 (0.00, 0.86)	6	1.28 (0.26, 2.30)
Maule	18	4	0.20 (0.00, 0.39)	11	0.40 (0.16, 0.63)
Metropolitano Central	18	3	0.19 (0.00, 0.41)	11	0.53 (0.22, 0.85)
Metropolitano Norte	18	2	0.08 (0.00, 0.18)	12	0.37 (0.16, 0.58)
Metropolitano Occidente	18	0	0.00 (0.00, 0.00)	14	0.34 (0.16, 0.51)
Metropolitano Oriente	18	3	0.11 (0.00, 0.23)	8	0.22 (0.07, 0.38)
Metropolitano Sur	18	0	0.00 (0.00, 0.00)	12	0.37 (0.16, 0.58)
Metropolitano Sur Oriente	18	2	0.06 (0.00, 0.14)	27	0.63 (0.39, 0.86)
Osorno	18	1	0.18 (0.00, 0.53)	0	0.00 (0.00, 0.00)
Reloncaví	18	0	0.00 (0.00, 0.00)	8	0.54 (0.17, 0.91)
Talcahuano	18	0	0.00 (0.00, 0.00)	5	0.64 (0.08, 1.21)

Table 5: Count and prevalence of autism cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Valdivia	18	0	0.00 (0.00, 0.00)	1	0.10 (0.00, 0.28)
Valparaíso San Antonio	18	3	0.31 (0.00, 0.66)	10	0.80 (0.31, 1.29)
Viña del Mar Quillota	18	4	0.18 (0.00, 0.36)	24	0.78 (0.47, 1.09)
Ñuble	18	0	0.00 (0.00, 0.00)	12	0.96 (0.42, 1.50)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals.

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Aconcagua	6	8	0.42 (0.13, 0.70)	6	0.30 (0.06, 0.54)
Aisén	6	3	0.43 (0.00, 0.91)	5	0.68 (0.09, 1.28)
Antofagasta	6	14	0.31 (0.15, 0.47)	12	0.26 (0.11, 0.40)
Araucanía Norte	6	4	0.30 (0.01, 0.60)	9	0.60 (0.21, 0.99)
Araucanía Sur	6	12	0.23 (0.10, 0.36)	26	0.50 (0.31, 0.69)
Arauco	6	4	0.33 (0.01, 0.66)	6	0.49 (0.10, 0.89)
Arica	6	0	0.00 (0.00, 0.00)	5	0.27 (0.03, 0.50)
Atacama	6	0	0.00 (0.00, 0.00)	2	0.09 (0.00, 0.21)
Biobío	6	10	0.36 (0.14, 0.59)	20	0.71 (0.40, 1.01)
Chiloé	6	3	0.28 (0.00, 0.59)	7	0.60 (0.16, 1.05)
Concepción	6	11	0.25 (0.10, 0.39)	12	0.27 (0.12, 0.42)
Coquimbo	6	23	0.42 (0.25, 0.59)	30	0.51 (0.33, 0.70)
Iquique	6	6	0.22 (0.04, 0.40)	12	0.41 (0.18, 0.64)
Libertador B.O'Higgins	6	14	0.23 (0.11, 0.35)	36	0.54 (0.37, 0.72)
Magallanes	6	2	0.20 (0.00, 0.47)	2	0.19 (0.00, 0.45)
Maule	6	7	0.10 (0.02, 0.17)	18	0.24 (0.13, 0.34)
Metropolitano Central	6	17	0.37 (0.20, 0.55)	32	0.66 (0.43, 0.89)
Metropolitano Norte	6	7	0.10 (0.03, 0.17)	22	0.30 (0.18, 0.43)
Metropolitano Occidente	6	34	0.21 (0.14, 0.28)	38	0.23 (0.16, 0.30)
Metropolitano Oriente	6	10	0.14 (0.05, 0.22)	25	0.34 (0.21, 0.48)
Metropolitano Sur	6	10	0.13 (0.05, 0.21)	33	0.40 (0.26, 0.53)
Metropolitano Sur Oriente	6	24	0.28 (0.17, 0.39)	40	0.43 (0.30, 0.57)
Osorno	6	3	0.22 (0.00, 0.46)	2	0.13 (0.00, 0.32)
Reloncaví	6	8	0.27 (0.08, 0.46)	11	0.36 (0.15, 0.57)
Talcahuano	6	5	0.24 (0.03, 0.46)	12	0.55 (0.24, 0.86)
Valdivia	6	6	0.25 (0.05, 0.45)	19	0.77 (0.42, 1.11)
Valparaíso San Antonio	6	2	0.07 (0.00, 0.16)	8	0.25 (0.08, 0.43)
Viña del Mar Quillota	6	8	0.12 (0.04, 0.20)	17	0.24 (0.13, 0.36)
Ñuble	6	7	0.23 (0.06, 0.40)	11	0.35 (0.14, 0.56)
Aconcagua	7	16	0.85 (0.43, 1.26)	25	1.23 (0.75, 1.71)
Aisén	7	3	0.38 (0.00, 0.81)	12	1.59 (0.70, 2.49)
Antofagasta	7	27	0.59 (0.37, 0.82)	44	0.90 (0.64, 1.17)
Araucanía Norte	7	3	0.21 (0.00, 0.44)	19	1.20 (0.66, 1.73)
Araucanía Sur	7	30	0.58 (0.37, 0.79)	63	1.16 (0.88, 1.45)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Arauco	7	6	0.46 (0.09, 0.82)	16	1.24 (0.64, 1.84)
Arica	7	5	0.28 (0.03, 0.52)	17	0.87 (0.46, 1.28)
Atacama	7	2	0.09 (0.00, 0.20)	5	0.21 (0.03, 0.39)
Biobío	7	30	1.09 (0.70, 1.47)	47	1.56 (1.12, 2.00)
Chiloé	7	8	0.72 (0.22, 1.21)	23	1.97 (1.17, 2.76)
Concepción	7	45	1.05 (0.75, 1.36)	56	1.25 (0.92, 1.57)
Coquimbo	7	31	0.53 (0.35, 0.72)	60	0.98 (0.74, 1.23)
Iquique	7	4	0.14 (0.00, 0.28)	30	0.99 (0.64, 1.35)
Libertador B.O'Higgins	7	31	0.48 (0.31, 0.65)	83	1.24 (0.98, 1.51)
Magallanes	7	4	0.38 (0.01, 0.74)	22	1.98 (1.16, 2.80)
Maule	7	31	0.42 (0.27, 0.57)	63	0.80 (0.60, 1.00)
Metropolitano Central	7	30	0.64 (0.41, 0.86)	58	1.12 (0.83, 1.40)
Metropolitano Norte	7	36	0.49 (0.33, 0.65)	74	0.96 (0.74, 1.17)
Metropolitano Occidente	7	52	0.46 (0.33, 0.58)	96	0.80 (0.64, 0.96)
Metropolitano Oriente	7	44	0.59 (0.42, 0.76)	79	1.03 (0.80, 1.26)
Metropolitano Sur	7	49	0.60 (0.43, 0.77)	72	0.85 (0.66, 1.05)
Metropolitano Sur Oriente	7	57	0.60 (0.45, 0.76)	124	1.24 (1.02, 1.46)
Osorno	7	5	0.33 (0.04, 0.63)	11	0.68 (0.28, 1.07)
Reloncaví	7	13	0.42 (0.19, 0.65)	25	0.78 (0.47, 1.08)
Talcahuano	7	21	0.97 (0.56, 1.39)	39	1.71 (1.18, 2.24)
Valdivia	7	15	0.59 (0.29, 0.89)	30	1.10 (0.71, 1.50)
Valparaíso San Antonio	7	10	0.31 (0.12, 0.50)	27	0.81 (0.51, 1.12)
Viña del Mar Quillota	7	25	0.36 (0.22, 0.50)	55	0.76 (0.56, 0.96)
Ñuble	7	17	0.56 (0.30, 0.83)	40	1.21 (0.84, 1.59)
Aconcagua	8	32	1.76 (1.15, 2.36)	40	2.08 (1.44, 2.71)
Aisén	8	6	0.81 (0.16, 1.45)	21	2.67 (1.54, 3.80)
Antofagasta	8	25	0.53 (0.32, 0.74)	50	1.01 (0.73, 1.29)
Araucanía Norte	8	17	1.18 (0.62, 1.74)	24	1.59 (0.96, 2.22)
Araucanía Sur	8	57	1.09 (0.81, 1.37)	117	2.11 (1.73, 2.49)
Arauco	8	10	0.79 (0.30, 1.29)	27	2.18 (1.37, 2.99)
Arica	8	12	0.67 (0.29, 1.05)	24	1.25 (0.75, 1.74)
Atacama	8	5	0.22 (0.03, 0.42)	13	0.53 (0.24, 0.82)
Biobío	8	39	1.40 (0.96, 1.84)	66	2.34 (1.78, 2.90)
Chiloé	8	17	1.56 (0.83, 2.30)	36	2.97 (2.01, 3.93)
Concepción	8	45	1.03 (0.73, 1.32)	94	2.10 (1.68, 2.52)
Coquimbo	8	51	0.88 (0.64, 1.12)	144	2.32 (1.94, 2.69)
Iquique	8	25	0.90 (0.55, 1.25)	54	1.77 (1.31, 2.24)
Libertador B.O'Higgins	8	79	1.24 (0.97, 1.51)	133	2.02 (1.68, 2.36)
Magallanes	8	11	1.06 (0.44, 1.69)	33	3.13 (2.08, 4.18)
Maule	8	31	0.42 (0.28, 0.57)	101	1.36 (1.10, 1.63)
Metropolitano Central	8	40	0.86 (0.59, 1.12)	83	1.62 (1.28, 1.97)
Metropolitano Norte	8	71	0.99 (0.76, 1.21)	122	1.60 (1.32, 1.88)
Metropolitano Occidente	8	81	0.75 (0.58, 0.91)	162	1.43 (1.21, 1.65)
Metropolitano Oriente	8	62	0.83 (0.63, 1.04)	99	1.30 (1.05, 1.56)
Metropolitano Sur	8	72	0.90 (0.69, 1.11)	135	1.61 (1.34, 1.88)
Metropolitano Sur Oriente	8	108	1.17 (0.95, 1.39)	191	1.95 (1.68, 2.23)
Osorno	8	8	0.49 (0.15, 0.83)	19	1.18 (0.65, 1.70)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Reloncaví	8	20	0.66 (0.37, 0.94)	40	1.30 (0.90, 1.70)
Talcahuano	8	36	1.74 (1.17, 2.30)	59	2.79 (2.09, 3.50)
Valdivia	8	20	0.76 (0.43, 1.10)	53	1.94 (1.42, 2.45)
Valparaíso San Antonio	8	21	0.68 (0.39, 0.98)	53	1.63 (1.20, 2.07)
Viña del Mar Quillota	8	46	0.67 (0.48, 0.87)	99	1.38 (1.11, 1.65)
Ñuble	8	33	1.08 (0.71, 1.45)	59	1.91 (1.42, 2.39)
Aconcagua	9	52	2.62 (1.92, 3.33)	84	4.00 (3.16, 4.83)
Aisén	9	8	1.10 (0.34, 1.87)	24	2.97 (1.80, 4.14)
Antofagasta	9	46	0.97 (0.69, 1.25)	77	1.52 (1.18, 1.86)
Araucanía Norte	9	9	0.61 (0.21, 1.00)	41	2.62 (1.83, 3.41)
Araucanía Sur	9	84	1.57 (1.23, 1.90)	148	2.69 (2.26, 3.12)
Arauco	9	12	0.96 (0.42, 1.51)	26	2.00 (1.24, 2.76)
Arica	9	20	1.09 (0.61, 1.56)	37	1.85 (1.26, 2.44)
Atacama	9	16	0.66 (0.34, 0.98)	17	0.70 (0.37, 1.03)
Biobío	9	63	2.20 (1.66, 2.74)	89	3.08 (2.45, 3.71)
Chiloé	9	25	2.20 (1.35, 3.05)	59	4.57 (3.43, 5.70)
Concepción	9	82	1.85 (1.45, 2.25)	174	3.72 (3.18, 4.26)
Coquimbo	9	90	1.47 (1.17, 1.78)	164	2.68 (2.28, 3.09)
Iquique	9	34	1.22 (0.81, 1.63)	74	2.34 (1.81, 2.86)
Libertador B.O'Higgins	9	101	1.57 (1.27, 1.87)	193	2.81 (2.42, 3.20)
Magallanes	9	22	1.91 (1.12, 2.70)	52	4.79 (3.52, 6.06)
Maule	9	65	0.91 (0.69, 1.13)	166	2.22 (1.89, 2.55)
Metropolitano Central	9	46	0.93 (0.66, 1.19)	95	1.81 (1.45, 2.18)
Metropolitano Norte	9	83	1.13 (0.89, 1.37)	133	1.69 (1.41, 1.98)
Metropolitano Occidente	9	119	1.09 (0.90, 1.29)	197	1.69 (1.46, 1.92)
Metropolitano Oriente	9	64	0.88 (0.66, 1.09)	129	1.67 (1.38, 1.95)
Metropolitano Sur	9	117	1.39 (1.14, 1.64)	186	2.13 (1.82, 2.43)
Metropolitano Sur Oriente	9	121	1.29 (1.06, 1.52)	237	2.40 (2.09, 2.70)
Osorno	9	10	0.63 (0.24, 1.02)	25	1.45 (0.89, 2.02)
Reloncaví	9	18	0.58 (0.31, 0.85)	74	2.30 (1.78, 2.82)
Talcahuano	9	70	3.15 (2.42, 3.87)	84	3.49 (2.76, 4.22)
Valdivia	9	23	0.86 (0.51, 1.21)	54	1.97 (1.45, 2.50)
Valparaíso San Antonio	9	22	0.70 (0.41, 0.99)	52	1.57 (1.15, 1.99)
Viña del Mar Quillota	9	58	0.81 (0.60, 1.02)	171	2.32 (1.98, 2.67)
Ñuble	9	53	1.71 (1.25, 2.16)	105	3.22 (2.62, 3.83)
Aconcagua	10	42	2.12 (1.48, 2.75)	82	3.95 (3.11, 4.79)
Aisén	10	9	1.06 (0.37, 1.74)	35	4.10 (2.77, 5.43)
Antofagasta	10	47	0.94 (0.67, 1.21)	107	2.04 (1.65, 2.42)
Araucanía Norte	10	12	0.81 (0.35, 1.26)	43	2.87 (2.02, 3.72)
Araucanía Sur	10	82	1.51 (1.18, 1.83)	168	2.89 (2.46, 3.32)
Arauco	10	19	1.41 (0.78, 2.04)	35	2.55 (1.72, 3.39)
Arica	10	24	1.25 (0.75, 1.75)	39	1.92 (1.32, 2.51)
Atacama	10	5	0.20 (0.02, 0.37)	17	0.65 (0.34, 0.95)
Biobío	10	59	2.09 (1.56, 2.62)	119	4.01 (3.30, 4.71)
Chiloé	10	30	2.40 (1.55, 3.25)	58	4.66 (3.49, 5.83)
Concepción	10	116	2.38 (1.95, 2.81)	224	4.41 (3.85, 4.98)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Coquimbo	10	107	1.77 (1.44, 2.10)	188	2.98 (2.56, 3.40)
Iquique	10	36	1.21 (0.82, 1.60)	84	2.73 (2.16, 3.31)
Libertador B.O'Higgins	10	106	1.59 (1.29, 1.89)	234	3.37 (2.95, 3.79)
Magallanes	10	35	3.11 (2.09, 4.12)	56	4.69 (3.49, 5.89)
Maule	10	73	0.98 (0.76, 1.21)	205	2.57 (2.22, 2.91)
Metropolitano Central	10	80	1.65 (1.29, 2.00)	169	3.23 (2.75, 3.70)
Metropolitano Norte	10	101	1.38 (1.11, 1.65)	181	2.30 (1.97, 2.64)
Metropolitano Occidente	10	143	1.32 (1.10, 1.53)	267	2.27 (2.00, 2.54)
Metropolitano Oriente	10	87	1.15 (0.91, 1.39)	173	2.16 (1.84, 2.47)
Metropolitano Sur	10	135	1.62 (1.35, 1.89)	230	2.63 (2.29, 2.96)
Metropolitano Sur Oriente	10	159	1.66 (1.41, 1.92)	315	3.09 (2.75, 3.43)
Osorno	10	13	0.76 (0.35, 1.17)	27	1.57 (0.98, 2.16)
Reloncaví	10	25	0.77 (0.47, 1.06)	63	1.81 (1.37, 2.25)
Talcahuano	10	60	2.69 (2.02, 3.37)	104	4.48 (3.64, 5.33)
Valdivia	10	24	0.86 (0.52, 1.21)	66	2.35 (1.79, 2.92)
Valparaíso San Antonio	10	42	1.33 (0.93, 1.73)	68	2.11 (1.62, 2.61)
Viña del Mar Quillota	10	84	1.20 (0.95, 1.46)	170	2.29 (1.95, 2.63)
Ñuble	10	66	2.06 (1.57, 2.55)	137	4.16 (3.48, 4.84)
Aconcagua	11	50	2.63 (1.91, 3.35)	80	3.99 (3.13, 4.85)
Aisén	11	21	2.64 (1.53, 3.76)	35	4.29 (2.90, 5.68)
Antofagasta	11	50	0.98 (0.71, 1.26)	91	1.73 (1.37, 2.08)
Araucanía Norte	11	13	0.92 (0.42, 1.41)	46	3.07 (2.20, 3.94)
Araucanía Sur	11	74	1.36 (1.05, 1.67)	171	3.03 (2.59, 3.48)
Arauco	11	16	1.23 (0.63, 1.83)	46	3.33 (2.38, 4.27)
Arica	11	16	0.87 (0.44, 1.29)	42	2.14 (1.50, 2.78)
Atacama	11	7	0.28 (0.07, 0.48)	28	1.08 (0.68, 1.47)
Biobío	11	53	1.79 (1.32, 2.27)	121	3.90 (3.22, 4.58)
Chiloé	11	28	2.30 (1.46, 3.15)	66	5.05 (3.86, 6.24)
Concepción	11	135	3.01 (2.51, 3.51)	235	4.96 (4.34, 5.58)
Coquimbo	11	124	2.06 (1.70, 2.41)	193	3.11 (2.68, 3.54)
Iquique	11	38	1.32 (0.90, 1.74)	87	2.81 (2.23, 3.39)
Libertador B.O'Higgins	11	111	1.65 (1.34, 1.95)	223	3.16 (2.75, 3.57)
Magallanes	11	26	2.19 (1.36, 3.02)	59	4.98 (3.74, 6.22)
Maule	11	89	1.21 (0.96, 1.46)	196	2.50 (2.16, 2.85)
Metropolitano Central	11	72	1.44 (1.11, 1.78)	166	3.11 (2.65, 3.58)
Metropolitano Norte	11	115	1.56 (1.28, 1.85)	193	2.45 (2.11, 2.79)
Metropolitano Occidente	11	110	1.01 (0.82, 1.20)	249	2.20 (1.93, 2.47)
Metropolitano Oriente	11	87	1.16 (0.92, 1.41)	176	2.27 (1.94, 2.60)
Metropolitano Sur	11	134	1.62 (1.35, 1.89)	240	2.69 (2.35, 3.02)
Metropolitano Sur Oriente	11	166	1.71 (1.46, 1.97)	261	2.60 (2.29, 2.91)
Osorno	11	17	1.04 (0.55, 1.53)	43	2.50 (1.76, 3.24)
Reloncaví	11	37	1.12 (0.76, 1.48)	64	1.84 (1.39, 2.28)
Talcahuano	11	70	3.21 (2.47, 3.95)	128	5.47 (4.55, 6.40)
Valdivia	11	34	1.24 (0.82, 1.65)	59	2.02 (1.51, 2.54)
Valparaíso San Antonio	11	35	1.11 (0.75, 1.48)	80	2.48 (1.95, 3.02)
Viña del Mar Quillota	11	89	1.25 (0.99, 1.51)	190	2.57 (2.21, 2.93)
Ñuble	11	56	1.73 (1.28, 2.19)	123	3.70 (3.06, 4.34)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Aconcagua	12	39	2.00 (1.38, 2.62)	83	4.36 (3.45, 5.28)
Aisén	12	17	1.91 (1.01, 2.82)	35	3.80 (2.56, 5.03)
Antofagasta	12	41	0.83 (0.57, 1.08)	72	1.35 (1.04, 1.65)
Araucanía Norte	12	18	1.18 (0.64, 1.73)	48	2.99 (2.16, 3.83)
Araucanía Sur	12	66	1.17 (0.89, 1.45)	156	2.74 (2.32, 3.17)
Arauco	12	10	0.81 (0.31, 1.31)	46	3.43 (2.45, 4.40)
Arica	12	13	0.72 (0.33, 1.11)	56	2.90 (2.15, 3.65)
Atacama	12	13	0.52 (0.24, 0.80)	19	0.75 (0.41, 1.09)
Biobío	12	49	1.67 (1.20, 2.13)	131	4.20 (3.50, 4.90)
Chiloé	12	28	2.17 (1.37, 2.96)	70	4.94 (3.81, 6.06)
Concepción	12	129	2.96 (2.46, 3.46)	220	4.82 (4.20, 5.45)
Coquimbo	12	103	1.74 (1.41, 2.08)	234	3.85 (3.37, 4.34)
Iquique	12	42	1.48 (1.04, 1.93)	67	2.14 (1.63, 2.65)
Libertador B.O'Higgins	12	114	1.71 (1.40, 2.02)	277	3.95 (3.50, 4.41)
Magallanes	12	27	2.30 (1.44, 3.16)	55	4.62 (3.43, 5.81)
Maule	12	88	1.15 (0.91, 1.39)	187	2.35 (2.02, 2.69)
Metropolitano Central	12	69	1.39 (1.06, 1.71)	143	2.73 (2.29, 3.17)
Metropolitano Norte	12	101	1.35 (1.09, 1.61)	189	2.39 (2.05, 2.73)
Metropolitano Occidente	12	113	1.05 (0.85, 1.24)	233	2.04 (1.78, 2.30)
Metropolitano Oriente	12	76	1.01 (0.79, 1.24)	157	2.04 (1.72, 2.35)
Metropolitano Sur	12	118	1.43 (1.17, 1.69)	208	2.34 (2.03, 2.66)
Metropolitano Sur Oriente	12	167	1.72 (1.46, 1.98)	265	2.57 (2.27, 2.88)
Osorno	12	14	0.81 (0.39, 1.23)	32	1.82 (1.19, 2.44)
Reloncaví	12	26	0.77 (0.47, 1.06)	54	1.56 (1.15, 1.97)
Talcahuano	12	66	2.90 (2.21, 3.59)	121	5.01 (4.14, 5.88)
Valdivia	12	21	0.77 (0.44, 1.10)	53	1.83 (1.34, 2.32)
Valparaíso San Antonio	12	23	0.74 (0.44, 1.05)	81	2.50 (1.96, 3.03)
Viña del Mar Quillota	12	85	1.22 (0.96, 1.47)	165	2.25 (1.91, 2.59)
Ñuble	12	67	1.99 (1.52, 2.46)	125	3.61 (2.99, 4.23)
Aconcagua	13	26	1.43 (0.88, 1.97)	61	3.20 (2.41, 3.98)
Aisén	13	11	1.39 (0.57, 2.21)	38	4.38 (3.02, 5.75)
Antofagasta	13	34	0.71 (0.47, 0.94)	92	1.78 (1.42, 2.14)
Araucanía Norte	13	13	0.88 (0.40, 1.36)	49	3.00 (2.17, 3.83)
Araucanía Sur	13	44	0.84 (0.59, 1.08)	137	2.46 (2.05, 2.87)
Arauco	13	12	0.98 (0.43, 1.53)	30	2.39 (1.54, 3.23)
Arica	13	13	0.73 (0.33, 1.12)	43	2.35 (1.66, 3.05)
Atacama	13	12	0.50 (0.22, 0.78)	25	1.00 (0.61, 1.38)
Biobío	13	49	1.69 (1.22, 2.16)	126	4.28 (3.55, 5.01)
Chiloé	13	35	2.68 (1.81, 3.56)	70	5.17 (3.99, 6.35)
Concepción	13	119	2.75 (2.26, 3.24)	211	4.65 (4.04, 5.26)
Coquimbo	13	98	1.76 (1.41, 2.10)	167	2.94 (2.50, 3.38)
Iquique	13	24	0.88 (0.53, 1.24)	78	2.61 (2.04, 3.18)
Libertador B.O'Higgins	13	100	1.50 (1.21, 1.79)	211	3.10 (2.69, 3.51)
Magallanes	13	28	2.42 (1.53, 3.30)	60	5.08 (3.82, 6.33)
Maule	13	60	0.83 (0.62, 1.04)	197	2.56 (2.21, 2.92)
Metropolitano Central	13	55	1.12 (0.82, 1.41)	133	2.52 (2.09, 2.94)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Metropolitano Norte	13	75	1.05 (0.81, 1.28)	185	2.43 (2.08, 2.77)
Metropolitano Occidente	13	99	0.94 (0.76, 1.13)	203	1.83 (1.58, 2.08)
Metropolitano Oriente	13	70	0.95 (0.73, 1.17)	151	2.00 (1.69, 2.32)
Metropolitano Sur	13	101	1.26 (1.01, 1.50)	192	2.27 (1.96, 2.59)
Metropolitano Sur Oriente	13	130	1.35 (1.12, 1.58)	244	2.42 (2.12, 2.72)
Osorno	13	11	0.65 (0.27, 1.03)	49	2.88 (2.09, 3.68)
Reloncaví	13	23	0.70 (0.42, 0.99)	49	1.39 (1.01, 1.78)
Talcahuano	13	60	2.75 (2.07, 3.44)	137	5.71 (4.78, 6.64)
Valdivia	13	18	0.68 (0.37, 0.99)	59	2.06 (1.54, 2.59)
Valparaíso San Antonio	13	35	1.16 (0.78, 1.55)	77	2.42 (1.89, 2.96)
Viña del Mar Quillota	13	56	0.80 (0.59, 1.01)	160	2.21 (1.87, 2.55)
Ñuble	13	61	1.90 (1.43, 2.37)	142	4.13 (3.47, 4.80)
Aconcagua	14	19	1.08 (0.60, 1.56)	43	2.26 (1.59, 2.93)
Aisén	14	11	1.39 (0.58, 2.21)	39	4.50 (3.12, 5.88)
Antofagasta	14	19	0.40 (0.22, 0.59)	84	1.66 (1.31, 2.01)
Araucanía Norte	14	13	0.83 (0.38, 1.29)	21	1.38 (0.80, 1.97)
Araucanía Sur	14	43	0.83 (0.59, 1.08)	96	1.80 (1.44, 2.15)
Arauco	14	11	0.89 (0.37, 1.41)	42	3.19 (2.24, 4.13)
Arica	14	9	0.56 (0.19, 0.92)	37	2.15 (1.47, 2.84)
Atacama	14	6	0.26 (0.05, 0.46)	15	0.60 (0.30, 0.91)
Biobío	14	42	1.47 (1.03, 1.91)	101	3.24 (2.62, 3.87)
Chiloé	14	32	2.61 (1.72, 3.51)	69	5.35 (4.12, 6.58)
Concepción	14	126	3.02 (2.50, 3.54)	210	4.68 (4.07, 5.30)
Coquimbo	14	85	1.64 (1.29, 1.99)	164	2.98 (2.53, 3.42)
Iquique	14	34	1.29 (0.86, 1.73)	64	2.25 (1.71, 2.80)
Libertador B.O'Higgins	14	49	0.79 (0.57, 1.01)	145	2.22 (1.86, 2.58)
Magallanes	14	26	2.33 (1.45, 3.22)	63	5.38 (4.09, 6.67)
Maule	14	49	0.69 (0.50, 0.88)	160	2.16 (1.83, 2.49)
Metropolitano Central	14	47	0.97 (0.69, 1.24)	124	2.47 (2.04, 2.90)
Metropolitano Norte	14	94	1.38 (1.10, 1.65)	144	2.04 (1.71, 2.36)
Metropolitano Occidente	14	66	0.65 (0.50, 0.81)	161	1.50 (1.27, 1.73)
Metropolitano Oriente	14	66	0.91 (0.69, 1.13)	152	2.04 (1.72, 2.36)
Metropolitano Sur	14	64	0.82 (0.62, 1.02)	157	1.90 (1.61, 2.20)
Metropolitano Sur Oriente	14	81	0.88 (0.69, 1.08)	178	1.86 (1.59, 2.13)
Osorno	14	5	0.32 (0.04, 0.61)	25	1.50 (0.92, 2.08)
Reloncaví	14	15	0.48 (0.24, 0.73)	53	1.61 (1.18, 2.04)
Talcahuano	14	47	2.14 (1.54, 2.75)	109	4.81 (3.93, 5.70)
Valdivia	14	13	0.47 (0.22, 0.73)	27	1.00 (0.63, 1.38)
Valparaíso San Antonio	14	18	0.61 (0.33, 0.89)	58	1.90 (1.42, 2.39)
Viña del Mar Quillota	14	42	0.61 (0.43, 0.80)	107	1.58 (1.28, 1.88)
Ñuble	14	38	1.18 (0.81, 1.56)	108	3.26 (2.65, 3.86)
Aconcagua	15	20	1.11 (0.63, 1.60)	47	2.71 (1.95, 3.47)
Aisén	15	10	1.28 (0.49, 2.07)	25	3.08 (1.89, 4.27)
Antofagasta	15	22	0.49 (0.29, 0.70)	69	1.43 (1.10, 1.77)
Araucanía Norte	15	7	0.49 (0.13, 0.85)	15	1.01 (0.50, 1.52)
Araucanía Sur	15	37	0.73 (0.50, 0.97)	86	1.63 (1.29, 1.98)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Arauco	15	12	1.01 (0.44, 1.58)	37	2.97 (2.03, 3.91)
Arica	15	13	0.77 (0.36, 1.19)	18	1.05 (0.57, 1.53)
Atacama	15	7	0.31 (0.08, 0.54)	28	1.21 (0.77, 1.66)
Biobío	15	28	1.01 (0.64, 1.38)	76	2.58 (2.01, 3.15)
Chiloé	15	26	1.97 (1.22, 2.72)	63	4.89 (3.71, 6.07)
Concepción	15	101	2.43 (1.96, 2.90)	187	4.27 (3.67, 4.87)
Coquimbo	15	81	1.54 (1.20, 1.87)	161	2.96 (2.51, 3.40)
Iquique	15	24	0.94 (0.57, 1.32)	55	1.99 (1.47, 2.52)
Libertador B.O'Higgins	15	56	0.92 (0.68, 1.16)	126	1.97 (1.63, 2.31)
Magallanes	15	24	2.11 (1.27, 2.94)	58	4.69 (3.51, 5.87)
Maule	15	30	0.44 (0.28, 0.60)	125	1.72 (1.42, 2.02)
Metropolitano Central	15	48	1.04 (0.75, 1.33)	98	2.01 (1.62, 2.41)
Metropolitano Norte	15	71	1.07 (0.82, 1.32)	117	1.68 (1.38, 1.98)
Metropolitano Occidente	15	62	0.64 (0.48, 0.80)	122	1.17 (0.96, 1.38)
Metropolitano Oriente	15	61	0.88 (0.66, 1.10)	123	1.72 (1.42, 2.02)
Metropolitano Sur	15	59	0.80 (0.60, 1.00)	131	1.68 (1.39, 1.96)
Metropolitano Sur Oriente	15	102	1.10 (0.89, 1.32)	166	1.75 (1.48, 2.01)
Osorno	15	8	0.50 (0.16, 0.85)	24	1.45 (0.87, 2.03)
Reloncaví	15	13	0.42 (0.19, 0.65)	51	1.55 (1.13, 1.98)
Talcahuano	15	34	1.66 (1.11, 2.22)	74	3.39 (2.63, 4.15)
Valdivia	15	12	0.46 (0.20, 0.71)	26	0.96 (0.59, 1.32)
Valparaíso San Antonio	15	15	0.51 (0.25, 0.77)	50	1.62 (1.17, 2.06)
Viña del Mar Quillota	15	37	0.57 (0.39, 0.76)	93	1.35 (1.08, 1.62)
Ñuble	15	48	1.53 (1.10, 1.96)	101	3.11 (2.52, 3.71)
Aconcagua	16	18	0.96 (0.52, 1.40)	35	1.92 (1.29, 2.54)
Aisén	16	9	1.15 (0.40, 1.89)	22	2.68 (1.58, 3.79)
Antofagasta	16	23	0.50 (0.29, 0.70)	52	1.12 (0.82, 1.42)
Araucanía Norte	16	15	1.06 (0.52, 1.59)	14	0.90 (0.43, 1.37)
Araucanía Sur	16	22	0.44 (0.25, 0.62)	45	0.86 (0.61, 1.10)
Arauco	16	12	0.98 (0.43, 1.53)	33	2.65 (1.76, 3.55)
Arica	16	7	0.42 (0.11, 0.74)	24	1.37 (0.83, 1.92)
Atacama	16	9	0.42 (0.14, 0.69)	12	0.52 (0.23, 0.82)
Biobío	16	48	1.72 (1.23, 2.20)	90	3.11 (2.48, 3.74)
Chiloé	16	18	1.52 (0.82, 2.21)	51	4.00 (2.92, 5.08)
Concepción	16	104	2.53 (2.05, 3.01)	179	4.18 (3.58, 4.78)
Coquimbo	16	60	1.16 (0.86, 1.45)	148	2.76 (2.32, 3.20)
Iquique	16	13	0.51 (0.23, 0.79)	46	1.68 (1.20, 2.16)
Libertador B.O'Higgins	16	60	0.98 (0.73, 1.23)	111	1.72 (1.40, 2.03)
Magallanes	16	22	1.97 (1.15, 2.78)	63	5.34 (4.06, 6.62)
Maule	16	32	0.47 (0.30, 0.63)	82	1.13 (0.89, 1.38)
Metropolitano Central	16	40	0.84 (0.58, 1.10)	74	1.52 (1.17, 1.86)
Metropolitano Norte	16	69	1.05 (0.80, 1.29)	102	1.50 (1.21, 1.78)
Metropolitano Occidente	16	47	0.49 (0.35, 0.62)	125	1.23 (1.02, 1.44)
Metropolitano Oriente	16	52	0.74 (0.54, 0.94)	104	1.44 (1.16, 1.71)
Metropolitano Sur	16	66	0.90 (0.68, 1.11)	120	1.59 (1.31, 1.87)
Metropolitano Sur Oriente	16	92	1.03 (0.82, 1.24)	164	1.73 (1.47, 2.00)
Osorno	16	7	0.45 (0.12, 0.77)	17	1.03 (0.54, 1.51)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Reloncaví	16	18	0.59 (0.32, 0.86)	48	1.49 (1.07, 1.91)
Talcahuano	16	59	2.77 (2.08, 3.47)	93	4.26 (3.41, 5.11)
Valdivia	16	13	0.51 (0.23, 0.79)	21	0.77 (0.44, 1.10)
Valparaíso San Antonio	16	15	0.51 (0.25, 0.77)	46	1.50 (1.07, 1.93)
Viña del Mar Quillota	16	28	0.44 (0.28, 0.61)	95	1.39 (1.11, 1.67)
Ñuble	16	45	1.44 (1.02, 1.85)	81	2.45 (1.92, 2.98)
Aconcagua	17	12	0.72 (0.32, 1.13)	36	2.00 (1.35, 2.64)
Aisén	17	12	1.61 (0.71, 2.51)	21	2.71 (1.57, 3.85)
Antofagasta	17	21	0.48 (0.28, 0.68)	47	1.01 (0.72, 1.30)
Araucanía Norte	17	11	0.79 (0.32, 1.25)	18	1.33 (0.72, 1.94)
Araucanía Sur	17	26	0.50 (0.31, 0.70)	61	1.17 (0.88, 1.46)
Arauco	17	9	0.73 (0.25, 1.20)	20	1.61 (0.91, 2.32)
Arica	17	7	0.41 (0.11, 0.72)	16	0.93 (0.48, 1.38)
Atacama	17	4	0.19 (0.00, 0.38)	13	0.58 (0.27, 0.90)
Biobío	17	40	1.40 (0.97, 1.84)	77	2.71 (2.11, 3.31)
Chiloé	17	29	2.36 (1.51, 3.20)	42	3.18 (2.23, 4.13)
Concepción	17	113	2.81 (2.30, 3.32)	167	3.97 (3.38, 4.56)
Coquimbo	17	62	1.24 (0.93, 1.54)	138	2.61 (2.18, 3.04)
Iquique	17	21	0.85 (0.49, 1.21)	55	2.13 (1.57, 2.68)
Libertador B.O'Higgins	17	45	0.75 (0.53, 0.96)	85	1.33 (1.05, 1.61)
Magallanes	17	23	2.06 (1.23, 2.89)	56	4.75 (3.54, 5.96)
Maule	17	32	0.46 (0.30, 0.62)	60	0.83 (0.62, 1.04)
Metropolitano Central	17	36	0.75 (0.51, 1.00)	73	1.44 (1.12, 1.77)
Metropolitano Norte	17	78	1.23 (0.96, 1.50)	93	1.36 (1.08, 1.63)
Metropolitano Occidente	17	55	0.58 (0.43, 0.73)	111	1.13 (0.92, 1.34)
Metropolitano Oriente	17	49	0.70 (0.50, 0.89)	83	1.15 (0.90, 1.39)
Metropolitano Sur	17	61	0.82 (0.62, 1.03)	91	1.20 (0.95, 1.44)
Metropolitano Sur Oriente	17	72	0.78 (0.60, 0.96)	143	1.54 (1.29, 1.79)
Osorno	17	12	0.79 (0.34, 1.23)	24	1.51 (0.91, 2.11)
Reloncaví	17	12	0.39 (0.17, 0.61)	39	1.24 (0.86, 1.63)
Talcahuano	17	58	2.64 (1.97, 3.30)	94	4.10 (3.29, 4.91)
Valdivia	17	4	0.16 (0.00, 0.31)	25	0.98 (0.60, 1.36)
Valparaíso San Antonio	17	25	0.86 (0.52, 1.19)	40	1.29 (0.89, 1.69)
Viña del Mar Quillota	17	27	0.42 (0.26, 0.57)	76	1.13 (0.88, 1.38)
Ñuble	17	38	1.21 (0.83, 1.59)	72	2.22 (1.71, 2.72)
Aconcagua	18	8	1.50 (0.47, 2.53)	10	1.41 (0.54, 2.28)
Aisén	18	4	1.42 (0.04, 2.80)	8	1.96 (0.61, 3.30)
Antofagasta	18	6	0.44 (0.09, 0.78)	23	1.34 (0.80, 1.89)
Araucanía Norte	18	1	0.27 (0.00, 0.79)	6	1.09 (0.22, 1.97)
Araucanía Sur	18	13	0.86 (0.39, 1.32)	16	0.78 (0.40, 1.16)
Arauco	18	4	1.10 (0.03, 2.18)	13	2.66 (1.24, 4.09)
Arica	18	3	0.66 (0.00, 1.41)	8	1.39 (0.43, 2.34)
Atacama	18	2	0.29 (0.00, 0.69)	7	0.79 (0.21, 1.37)
Biobío	18	12	1.66 (0.73, 2.60)	35	3.05 (2.05, 4.04)
Chiloé	18	11	2.38 (0.99, 3.77)	11	1.66 (0.69, 2.64)
Concepción	18	55	4.10 (3.04, 5.16)	72	4.34 (3.36, 5.32)

Table 6: Count and prevalence of ADHD cases by health service and age in Chile school data for females and males with normal confidence intervals. (*continued*)

Health service	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Coquimbo	18	28	1.91 (1.21, 2.62)	61	2.93 (2.20, 3.65)
Iquique	18	14	1.59 (0.76, 2.41)	23	2.22 (1.32, 3.11)
Libertador B.O'Higgins	18	17	0.99 (0.52, 1.46)	44	1.65 (1.17, 2.13)
Magallanes	18	11	3.19 (1.33, 5.04)	21	4.49 (2.61, 6.36)
Maule	18	5	0.25 (0.03, 0.46)	24	0.87 (0.52, 1.21)
Metropolitano Central	18	15	0.95 (0.47, 1.43)	27	1.31 (0.82, 1.80)
Metropolitano Norte	18	38	1.43 (0.98, 1.89)	58	1.78 (1.33, 2.24)
Metropolitano Occidente	18	25	0.78 (0.47, 1.08)	60	1.44 (1.08, 1.80)
Metropolitano Oriente	18	25	0.88 (0.54, 1.23)	32	0.89 (0.58, 1.20)
Metropolitano Sur	18	17	0.70 (0.37, 1.04)	64	1.99 (1.51, 2.47)
Metropolitano Sur Oriente	18	26	0.79 (0.49, 1.09)	65	1.51 (1.15, 1.87)
Osorno	18	4	0.71 (0.02, 1.41)	6	0.83 (0.17, 1.49)
Reloncaví	18	2	0.18 (0.00, 0.43)	14	0.94 (0.45, 1.43)
Talcahuano	18	11	1.90 (0.79, 3.01)	28	3.61 (2.30, 4.92)
Valdivia	18	3	0.41 (0.00, 0.87)	15	1.44 (0.72, 2.17)
Valparaíso San Antonio	18	4	0.41 (0.01, 0.81)	25	2.00 (1.22, 2.78)
Viña del Mar Quillota	18	13	0.59 (0.27, 0.92)	28	0.91 (0.58, 1.25)
Ñuble	18	13	1.50 (0.69, 2.32)	36	2.87 (1.95, 3.80)

For school fees, which are used here as a proxy for SES, autism prevalence is highest among students that receive free or low fee education, though the sample size for students that pay \$1,000-\$10,000 monthly is very small. ADHD prevalence is more consistent across school fee levels, except for the \$1,000-\$10,000 band which has low prevalence and very few cases. Prevalence is higher among older students for higher fee bands. For both autism and ADHD, prevalence is very low among students paying more than \$100,000 monthly, suggesting students from wealthier families may not be accessing SEED or may not be eligible for it due to attending private schools.

Table 7: Count and prevalence of Autism cases by school fee and age in Chile school data for females and males with normal confidence intervals.

School fee	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Free	6	256	0.29 (0.26, 0.33)	1293	1.39 (1.31, 1.46)
\$1,000-\$10,000	6	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	6	2	0.13 (0.00, 0.31)	6	0.41 (0.08, 0.73)
\$25,001-\$50,000	6	7	0.08 (0.02, 0.15)	73	0.94 (0.72, 1.15)
\$50,001-\$100,000	6	21	0.21 (0.12, 0.30)	105	1.05 (0.85, 1.25)
\$100,001+	6	4	0.03 (0.00, 0.06)	12	0.10 (0.04, 0.15)
No information	6	4	0.14 (0.00, 0.28)	23	0.73 (0.43, 1.03)
Free	7	196	0.23 (0.20, 0.26)	1274	1.38 (1.30, 1.45)
\$1,000-\$10,000	7	0	0.00 (0.00, 0.00)	1	1.54 (0.00, 4.53)
\$10,001-\$25,000	7	2	0.13 (0.00, 0.30)	6	0.39 (0.08, 0.70)
\$25,001-\$50,000	7	18	0.21 (0.11, 0.30)	48	0.58 (0.42, 0.75)
\$50,001-\$100,000	7	14	0.13 (0.06, 0.20)	119	1.10 (0.90, 1.30)

Table 7: Count and prevalence of Autism cases by school fee and age in Chile school data for females and males with normal confidence intervals. (*continued*)

School fee	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
\$100,001+	7	3	0.02 (0.00, 0.05)	10	0.08 (0.03, 0.13)
No information	7	8	0.38 (0.12, 0.64)	25	1.03 (0.63, 1.43)
Free	8	203	0.24 (0.20, 0.27)	1232	1.36 (1.28, 1.43)
\$1,000-\$10,000	8	0	0.00 (0.00, 0.00)	1	2.22 (0.00, 6.53)
\$10,001-\$25,000	8	1	0.07 (0.00, 0.20)	8	0.53 (0.16, 0.90)
\$25,001-\$50,000	8	12	0.14 (0.06, 0.22)	47	0.58 (0.41, 0.75)
\$50,001-\$100,000	8	18	0.18 (0.10, 0.26)	72	0.67 (0.52, 0.82)
\$100,001+	8	1	0.01 (0.00, 0.02)	8	0.06 (0.02, 0.11)
No information	8	4	0.21 (0.00, 0.41)	25	1.06 (0.65, 1.48)
Free	9	169	0.19 (0.16, 0.22)	1132	1.21 (1.14, 1.28)
\$1,000-\$10,000	9	0	0.00 (0.00, 0.00)	2	4.26 (0.00, 10.03)
\$10,001-\$25,000	9	1	0.07 (0.00, 0.19)	8	0.55 (0.17, 0.93)
\$25,001-\$50,000	9	5	0.06 (0.01, 0.11)	53	0.64 (0.47, 0.81)
\$50,001-\$100,000	9	15	0.14 (0.07, 0.21)	91	0.82 (0.66, 0.99)
\$100,001+	9	3	0.02 (0.00, 0.05)	13	0.10 (0.05, 0.16)
No information	9	5	0.25 (0.03, 0.47)	26	1.15 (0.71, 1.59)
Free	10	131	0.15 (0.12, 0.17)	1078	1.12 (1.05, 1.19)
\$1,000-\$10,000	10	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	10	0	0.00 (0.00, 0.00)	8	0.56 (0.17, 0.94)
\$25,001-\$50,000	10	10	0.11 (0.04, 0.18)	51	0.61 (0.45, 0.78)
\$50,001-\$100,000	10	16	0.15 (0.08, 0.22)	92	0.82 (0.65, 0.99)
\$100,001+	10	3	0.02 (0.00, 0.05)	13	0.10 (0.05, 0.16)
No information	10	2	0.10 (0.00, 0.24)	31	1.34 (0.87, 1.81)
Free	11	134	0.15 (0.12, 0.17)	937	0.97 (0.91, 1.04)
\$1,000-\$10,000	11	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	11	0	0.00 (0.00, 0.00)	7	0.45 (0.12, 0.78)
\$25,001-\$50,000	11	11	0.13 (0.05, 0.20)	48	0.59 (0.42, 0.75)
\$50,001-\$100,000	11	14	0.13 (0.06, 0.20)	72	0.66 (0.50, 0.81)
\$100,001+	11	0	0.00 (0.00, 0.00)	9	0.07 (0.03, 0.12)
No information	11	4	0.22 (0.00, 0.44)	18	0.83 (0.45, 1.21)
Free	12	113	0.12 (0.10, 0.15)	892	0.92 (0.86, 0.98)
\$1,000-\$10,000	12	0	0.00 (0.00, 0.00)	3	6.52 (0.00, 13.66)
\$10,001-\$25,000	12	1	0.06 (0.00, 0.18)	3	0.20 (0.00, 0.42)
\$25,001-\$50,000	12	6	0.07 (0.01, 0.12)	49	0.62 (0.45, 0.79)
\$50,001-\$100,000	12	12	0.11 (0.05, 0.18)	70	0.62 (0.47, 0.76)
\$100,001+	12	2	0.02 (0.00, 0.04)	10	0.08 (0.03, 0.13)
No information	12	0	0.00 (0.00, 0.00)	15	0.70 (0.35, 1.06)
Free	13	130	0.15 (0.12, 0.17)	777	0.83 (0.77, 0.88)
\$1,000-\$10,000	13	0	0.00 (0.00, 0.00)	1	2.70 (0.00, 7.93)
\$10,001-\$25,000	13	0	0.00 (0.00, 0.00)	2	0.13 (0.00, 0.32)
\$25,001-\$50,000	13	7	0.08 (0.02, 0.14)	38	0.50 (0.34, 0.65)
\$50,001-\$100,000	13	4	0.04 (0.00, 0.08)	68	0.60 (0.46, 0.74)
\$100,001+	13	1	0.01 (0.00, 0.02)	13	0.11 (0.05, 0.17)
No information	13	3	0.19 (0.00, 0.40)	13	0.70 (0.32, 1.08)

Table 7: Count and prevalence of Autism cases by school fee and age in Chile school data for females and males with normal confidence intervals. (*continued*)

School fee	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Free	14	89	0.11 (0.09, 0.13)	577	0.66 (0.60, 0.71)
\$1,000-\$10,000	14	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	14	1	0.07 (0.00, 0.20)	4	0.29 (0.01, 0.58)
\$25,001-\$50,000	14	8	0.08 (0.03, 0.14)	39	0.48 (0.33, 0.63)
\$50,001-\$100,000	14	9	0.08 (0.03, 0.13)	57	0.47 (0.35, 0.59)
\$100,001+	14	1	0.01 (0.00, 0.02)	8	0.07 (0.02, 0.11)
No information	14	4	0.25 (0.01, 0.50)	8	0.40 (0.12, 0.68)
Free	15	79	0.10 (0.08, 0.12)	478	0.56 (0.51, 0.61)
\$1,000-\$10,000	15	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	15	1	0.06 (0.00, 0.19)	4	0.31 (0.01, 0.61)
\$25,001-\$50,000	15	5	0.05 (0.01, 0.10)	28	0.34 (0.21, 0.47)
\$50,001-\$100,000	15	8	0.07 (0.02, 0.11)	55	0.46 (0.34, 0.58)
\$100,001+	15	2	0.02 (0.00, 0.04)	10	0.08 (0.03, 0.14)
No information	15	1	0.07 (0.00, 0.21)	9	0.48 (0.17, 0.79)
Free	16	82	0.10 (0.08, 0.13)	482	0.57 (0.51, 0.62)
\$1,000-\$10,000	16	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	16	1	0.07 (0.00, 0.20)	5	0.39 (0.05, 0.72)
\$25,001-\$50,000	16	5	0.05 (0.01, 0.10)	20	0.25 (0.14, 0.36)
\$50,001-\$100,000	16	10	0.09 (0.03, 0.14)	43	0.36 (0.26, 0.47)
\$100,001+	16	0	0.00 (0.00, 0.00)	8	0.07 (0.02, 0.12)
No information	16	2	0.14 (0.00, 0.34)	7	0.37 (0.10, 0.65)
Free	17	43	0.05 (0.04, 0.07)	362	0.43 (0.38, 0.47)
\$1,000-\$10,000	17	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	17	0	0.00 (0.00, 0.00)	1	0.08 (0.00, 0.23)
\$25,001-\$50,000	17	6	0.07 (0.01, 0.12)	23	0.30 (0.18, 0.42)
\$50,001-\$100,000	17	5	0.04 (0.01, 0.08)	35	0.30 (0.20, 0.40)
\$100,001+	17	0	0.00 (0.00, 0.00)	5	0.04 (0.01, 0.08)
No information	17	1	0.07 (0.00, 0.20)	10	0.55 (0.21, 0.89)
Free	18	32	0.11 (0.07, 0.15)	225	0.58 (0.51, 0.66)
\$1,000-\$10,000	18	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	18	1	0.27 (0.00, 0.79)	0	0.00 (0.00, 0.00)
\$25,001-\$50,000	18	0	0.00 (0.00, 0.00)	11	0.49 (0.20, 0.79)
\$50,001-\$100,000	18	6	0.26 (0.05, 0.47)	20	0.62 (0.35, 0.89)
\$100,001+	18	0	0.00 (0.00, 0.00)	2	0.05 (0.00, 0.12)
No information	18	0	0.00 (0.00, 0.00)	4	0.34 (0.01, 0.67)

Table 8: Count and prevalence of ADHD cases by school fee and age in Chile school data for females and males with normal confidence intervals.

School fee	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Free	6	190	0.22 (0.19, 0.25)	363	0.39 (0.35, 0.43)

Table 8: Count and prevalence of ADHD cases by school fee and age in Chile school data for females and males with normal confidence intervals. (*continued*)

School fee	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
\$1,000-\$10,000	6	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	6	5	0.33 (0.04, 0.61)	2	0.14 (0.00, 0.32)
\$25,001-\$50,000	6	25	0.30 (0.18, 0.42)	39	0.50 (0.34, 0.66)
\$50,001-\$100,000	6	31	0.31 (0.20, 0.42)	66	0.66 (0.50, 0.82)
\$100,001+	6	3	0.02 (0.00, 0.05)	2	0.02 (0.00, 0.04)
No information	6	8	0.29 (0.09, 0.49)	6	0.19 (0.04, 0.34)
Free	7	492	0.57 (0.52, 0.62)	1031	1.11 (1.05, 1.18)
\$1,000-\$10,000	7	0	0.00 (0.00, 0.00)	1	1.54 (0.00, 4.53)
\$10,001-\$25,000	7	5	0.32 (0.04, 0.60)	12	0.78 (0.34, 1.22)
\$25,001-\$50,000	7	59	0.68 (0.51, 0.85)	104	1.26 (1.02, 1.51)
\$50,001-\$100,000	7	79	0.76 (0.59, 0.92)	137	1.27 (1.05, 1.48)
\$100,001+	7	3	0.02 (0.00, 0.05)	8	0.06 (0.02, 0.11)
No information	7	12	0.56 (0.25, 0.88)	22	0.91 (0.53, 1.28)
Free	8	861	1.01 (0.94, 1.07)	1723	1.90 (1.81, 1.99)
\$1,000-\$10,000	8	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	8	22	1.46 (0.86, 2.07)	18	1.20 (0.65, 1.75)
\$25,001-\$50,000	8	83	0.98 (0.77, 1.19)	124	1.53 (1.26, 1.80)
\$50,001-\$100,000	8	90	0.89 (0.70, 1.07)	234	2.18 (1.90, 2.45)
\$100,001+	8	14	0.11 (0.05, 0.17)	22	0.18 (0.10, 0.25)
No information	8	10	0.51 (0.20, 0.83)	30	1.28 (0.82, 1.73)
Free	9	1181	1.34 (1.27, 1.42)	2386	2.54 (2.44, 2.64)
\$1,000-\$10,000	9	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	9	17	1.11 (0.59, 1.64)	32	2.21 (1.45, 2.97)
\$25,001-\$50,000	9	121	1.39 (1.14, 1.63)	172	2.08 (1.78, 2.39)
\$50,001-\$100,000	9	170	1.61 (1.37, 1.85)	300	2.72 (2.41, 3.02)
\$100,001+	9	13	0.10 (0.05, 0.16)	28	0.22 (0.14, 0.30)
No information	9	31	1.55 (1.01, 2.09)	49	2.17 (1.57, 2.77)
Free	10	1422	1.59 (1.50, 1.67)	2960	3.08 (2.97, 3.18)
\$1,000-\$10,000	10	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	10	19	1.23 (0.68, 1.78)	25	1.74 (1.06, 2.42)
\$25,001-\$50,000	10	148	1.66 (1.39, 1.92)	224	2.69 (2.35, 3.04)
\$50,001-\$100,000	10	188	1.73 (1.49, 1.98)	367	3.27 (2.94, 3.59)
\$100,001+	10	20	0.16 (0.09, 0.23)	45	0.35 (0.25, 0.45)
No information	10	24	1.20 (0.72, 1.68)	43	1.86 (1.31, 2.41)
Free	11	1458	1.62 (1.54, 1.71)	2977	3.10 (2.99, 3.21)
\$1,000-\$10,000	11	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	11	11	0.69 (0.28, 1.10)	45	2.89 (2.06, 3.72)
\$25,001-\$50,000	11	148	1.69 (1.42, 1.96)	220	2.68 (2.33, 3.03)
\$50,001-\$100,000	11	209	1.94 (1.68, 2.20)	357	3.25 (2.92, 3.58)
\$100,001+	11	29	0.23 (0.15, 0.32)	39	0.32 (0.22, 0.42)
No information	11	18	1.00 (0.54, 1.45)	53	2.44 (1.79, 3.09)
Free	12	1326	1.46 (1.38, 1.54)	2845	2.95 (2.84, 3.05)
\$1,000-\$10,000	12	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	12	18	1.11 (0.60, 1.63)	33	2.16 (1.43, 2.89)

Table 8: Count and prevalence of ADHD cases by school fee and age in Chile school data for females and males with normal confidence intervals. (*continued*)

School fee	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
\$25,001-\$50,000	12	147	1.68 (1.41, 1.95)	237	2.99 (2.62, 3.37)
\$50,001-\$100,000	12	198	1.86 (1.60, 2.11)	347	3.07 (2.75, 3.39)
\$100,001+	12	28	0.23 (0.14, 0.31)	52	0.43 (0.31, 0.54)
No information	12	26	1.55 (0.96, 2.14)	68	3.19 (2.44, 3.94)
Free	13	1147	1.31 (1.23, 1.38)	2649	2.81 (2.71, 2.92)
\$1,000-\$10,000	13	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	13	17	1.07 (0.57, 1.58)	25	1.67 (1.02, 2.32)
\$25,001-\$50,000	13	100	1.18 (0.95, 1.41)	235	3.07 (2.69, 3.46)
\$50,001-\$100,000	13	171	1.64 (1.40, 1.88)	379	3.36 (3.02, 3.69)
\$100,001+	13	24	0.20 (0.12, 0.28)	48	0.40 (0.29, 0.52)
No information	13	13	0.81 (0.37, 1.25)	40	2.16 (1.50, 2.82)
Free	14	869	1.06 (0.99, 1.13)	2140	2.43 (2.33, 2.53)
\$1,000-\$10,000	14	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	14	13	0.87 (0.40, 1.35)	21	1.54 (0.89, 2.20)
\$25,001-\$50,000	14	117	1.22 (1.00, 1.44)	166	2.05 (1.74, 2.36)
\$50,001-\$100,000	14	140	1.19 (1.00, 1.39)	357	2.94 (2.64, 3.25)
\$100,001+	14	20	0.17 (0.09, 0.24)	47	0.39 (0.28, 0.50)
No information	14	11	0.69 (0.29, 1.10)	25	1.26 (0.77, 1.74)
Free	15	786	0.99 (0.92, 1.06)	1807	2.11 (2.01, 2.20)
\$1,000-\$10,000	15	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	15	9	0.58 (0.20, 0.96)	13	1.00 (0.46, 1.54)
\$25,001-\$50,000	15	105	1.15 (0.93, 1.36)	164	2.00 (1.69, 2.30)
\$50,001-\$100,000	15	139	1.18 (0.98, 1.37)	300	2.52 (2.23, 2.80)
\$100,001+	15	22	0.19 (0.11, 0.27)	48	0.41 (0.29, 0.52)
No information	15	7	0.49 (0.13, 0.85)	20	1.06 (0.60, 1.53)
Free	16	740	0.94 (0.87, 1.00)	1605	1.88 (1.79, 1.97)
\$1,000-\$10,000	16	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	16	2	0.13 (0.00, 0.32)	7	0.54 (0.14, 0.94)
\$25,001-\$50,000	16	114	1.23 (1.00, 1.45)	137	1.70 (1.42, 1.98)
\$50,001-\$100,000	16	135	1.16 (0.97, 1.36)	274	2.32 (2.05, 2.59)
\$100,001+	16	26	0.22 (0.14, 0.31)	48	0.42 (0.30, 0.53)
No information	16	6	0.42 (0.09, 0.76)	26	1.39 (0.86, 1.92)
Free	17	746	0.94 (0.87, 1.01)	1464	1.73 (1.64, 1.82)
\$1,000-\$10,000	17	0	0.00 (0.00, 0.00)	1	1.23 (0.00, 3.64)
\$10,001-\$25,000	17	7	0.50 (0.13, 0.86)	2	0.16 (0.00, 0.37)
\$25,001-\$50,000	17	91	1.00 (0.80, 1.21)	122	1.58 (1.30, 1.86)
\$50,001-\$100,000	17	112	0.97 (0.79, 1.15)	229	1.99 (1.73, 2.24)
\$100,001+	17	22	0.20 (0.11, 0.28)	43	0.38 (0.27, 0.49)
No information	17	16	1.09 (0.56, 1.62)	15	0.82 (0.41, 1.24)
Free	18	307	1.06 (0.94, 1.18)	653	1.69 (1.56, 1.82)
\$1,000-\$10,000	18	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
\$10,001-\$25,000	18	3	0.81 (0.00, 1.72)	3	0.62 (0.00, 1.31)
\$25,001-\$50,000	18	33	1.75 (1.16, 2.34)	59	2.65 (1.98, 3.32)
\$50,001-\$100,000	18	30	1.32 (0.85, 1.78)	95	2.93 (2.35, 3.51)

Table 8: Count and prevalence of ADHD cases by school fee and age in Chile school data for females and males with normal confidence intervals. (*continued*)

School fee	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
\$100,001+	18	9	0.28 (0.10, 0.46)	12	0.29 (0.13, 0.45)
No information	18	8	1.08 (0.33, 1.82)	18	1.53 (0.83, 2.23)

Autism prevalence and distribution by age is very similar between Mapuche and non-Indigenous students in the Araucanía, Aysén, Biobío, Los Lagos, Los Ríos, Magallanes and Región Metropolitana de Santiago regions. ADHD prevalence is also consistent across Mapuche and non-Indigenous students. Among students of other Indigenous groups, autism and ADHD prevalence appear to peak in older age groups, however this result is based on very few cases.

Table 9: Count and prevalence of Autism cases by ethnicity and age in Chile school data for females and males with normal confidence intervals. Regions with high Mapuche populations only.

Ethnicity	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Mapuche	6	6	0.11 (0.02, 0.20)	46	0.82 (0.59, 1.06)
Other Indigenous group	6	0	0.00 (0.00, 0.00)	1	0.32 (0.00, 0.96)
No Indigenous group	6	115	0.19 (0.15, 0.22)	587	0.91 (0.84, 0.99)
Mapuche	7	8	0.13 (0.04, 0.23)	54	0.86 (0.63, 1.09)
Other Indigenous group	7	0	0.00 (0.00, 0.00)	4	1.69 (0.05, 3.34)
No Indigenous group	7	87	0.15 (0.12, 0.18)	562	0.91 (0.83, 0.98)
Mapuche	8	11	0.18 (0.07, 0.29)	50	0.80 (0.58, 1.02)
Other Indigenous group	8	0	0.00 (0.00, 0.00)	1	0.52 (0.00, 1.55)
No Indigenous group	8	87	0.15 (0.12, 0.18)	567	0.93 (0.86, 1.01)
Mapuche	9	3	0.05 (0.00, 0.10)	45	0.72 (0.51, 0.93)
Other Indigenous group	9	1	0.57 (0.00, 1.68)	4	2.25 (0.07, 4.42)
No Indigenous group	9	61	0.10 (0.08, 0.13)	497	0.79 (0.72, 0.86)
Mapuche	10	4	0.07 (0.00, 0.13)	41	0.63 (0.44, 0.82)
Other Indigenous group	10	0	0.00 (0.00, 0.00)	1	0.57 (0.00, 1.68)
No Indigenous group	10	63	0.10 (0.08, 0.13)	472	0.74 (0.67, 0.81)
Mapuche	11	3	0.05 (0.00, 0.10)	46	0.70 (0.50, 0.91)
Other Indigenous group	11	0	0.00 (0.00, 0.00)	2	1.03 (0.00, 2.45)
No Indigenous group	11	61	0.10 (0.08, 0.13)	421	0.67 (0.60, 0.73)
Mapuche	12	3	0.05 (0.00, 0.10)	26	0.39 (0.24, 0.54)
Other Indigenous group	12	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
No Indigenous group	12	59	0.10 (0.07, 0.12)	411	0.65 (0.59, 0.71)
Mapuche	13	4	0.06 (0.00, 0.12)	39	0.60 (0.42, 0.79)
Other Indigenous group	13	0	0.00 (0.00, 0.00)	1	0.57 (0.00, 1.69)
No Indigenous group	13	50	0.09 (0.06, 0.11)	366	0.59 (0.53, 0.65)
Mapuche	14	3	0.05 (0.00, 0.11)	30	0.49 (0.32, 0.67)
Other Indigenous group	14	0	0.00 (0.00, 0.00)	1	0.54 (0.00, 1.60)
No Indigenous group	14	36	0.06 (0.04, 0.08)	277	0.47 (0.41, 0.52)

Table 9: Count and prevalence of Autism cases by ethnicity and age in Chile school data for females and males with normal confidence intervals. Regions with high Mapuche populations only. (*continued*)

Ethnicity	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Mapuche	15	2	0.04 (0.00, 0.09)	24	0.46 (0.28, 0.64)
Other Indigenous group	15	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
No Indigenous group	15	33	0.06 (0.04, 0.08)	241	0.41 (0.36, 0.46)
Mapuche	16	0	0.00 (0.00, 0.00)	22	0.42 (0.24, 0.59)
Other Indigenous group	16	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
No Indigenous group	16	36	0.06 (0.04, 0.09)	224	0.38 (0.33, 0.43)
Mapuche	17	1	0.02 (0.00, 0.06)	12	0.23 (0.10, 0.36)
Other Indigenous group	17	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
No Indigenous group	17	16	0.03 (0.01, 0.04)	170	0.30 (0.25, 0.34)
Mapuche	18	0	0.00 (0.00, 0.00)	5	0.20 (0.02, 0.38)
Other Indigenous group	18	0	0.00 (0.00, 0.00)	1	1.64 (0.00, 4.83)
No Indigenous group	18	14	0.07 (0.03, 0.11)	117	0.46 (0.38, 0.54)

Table 10: Count and prevalence of ADHD cases by ethnicity and age in Chile school data for females and males with normal confidence intervals. Regions with high Mapuche populations only.

Ethnicity	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Mapuche	6	7	0.13 (0.03, 0.23)	29	0.52 (0.33, 0.71)
Other Indigenous group	6	0	0.00 (0.00, 0.00)	1	0.32 (0.00, 0.96)
No Indigenous group	6	136	0.22 (0.18, 0.26)	240	0.37 (0.33, 0.42)
Mapuche	7	31	0.52 (0.34, 0.70)	65	1.04 (0.79, 1.29)
Other Indigenous group	7	1	0.46 (0.00, 1.36)	2	0.85 (0.00, 2.02)
No Indigenous group	7	317	0.54 (0.48, 0.60)	641	1.03 (0.95, 1.11)
Mapuche	8	58	0.95 (0.71, 1.19)	106	1.70 (1.38, 2.02)
Other Indigenous group	8	2	1.09 (0.00, 2.60)	3	1.57 (0.00, 3.33)
No Indigenous group	8	529	0.91 (0.84, 0.99)	1026	1.69 (1.58, 1.79)
Mapuche	9	63	1.03 (0.77, 1.28)	133	2.12 (1.76, 2.47)
Other Indigenous group	9	0	0.00 (0.00, 0.00)	2	1.12 (0.00, 2.67)
No Indigenous group	9	686	1.16 (1.07, 1.25)	1319	2.11 (2.00, 2.22)
Mapuche	10	82	1.35 (1.06, 1.63)	185	2.84 (2.43, 3.24)
Other Indigenous group	10	2	1.03 (0.00, 2.44)	5	2.84 (0.39, 5.30)
No Indigenous group	10	851	1.42 (1.32, 1.51)	1661	2.61 (2.48, 2.73)
Mapuche	11	73	1.17 (0.91, 1.44)	186	2.84 (2.44, 3.25)
Other Indigenous group	11	5	2.67 (0.36, 4.99)	4	2.06 (0.06, 4.06)
No Indigenous group	11	856	1.43 (1.33, 1.52)	1638	2.60 (2.48, 2.72)
Mapuche	12	70	1.09 (0.84, 1.35)	160	2.40 (2.03, 2.76)
Other Indigenous group	12	0	0.00 (0.00, 0.00)	4	2.04 (0.06, 4.02)
No Indigenous group	12	791	1.31 (1.22, 1.40)	1534	2.42 (2.30, 2.54)

Table 10: Count and prevalence of ADHD cases by ethnicity and age in Chile school data for females and males with normal confidence intervals. Regions with high Mapuche populations only. (*continued*)

Ethnicity	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Mapuche	13	66	1.04 (0.79, 1.29)	144	2.23 (1.87, 2.59)
Other Indigenous group	13	2	1.20 (0.00, 2.85)	5	2.86 (0.39, 5.33)
No Indigenous group	13	645	1.10 (1.02, 1.18)	1470	2.37 (2.25, 2.49)
Mapuche	14	45	0.77 (0.55, 1.00)	108	1.77 (1.44, 2.10)
Other Indigenous group	14	2	1.16 (0.00, 2.76)	5	2.70 (0.37, 5.04)
No Indigenous group	14	529	0.93 (0.85, 1.00)	1194	2.01 (1.89, 2.12)
Mapuche	15	42	0.83 (0.58, 1.08)	76	1.45 (1.13, 1.78)
Other Indigenous group	15	1	0.73 (0.00, 2.16)	1	0.66 (0.00, 1.96)
No Indigenous group	15	497	0.88 (0.81, 0.96)	1028	1.74 (1.64, 1.85)
Mapuche	16	23	0.46 (0.27, 0.64)	66	1.25 (0.95, 1.55)
Other Indigenous group	16	3	1.86 (0.00, 3.95)	1	0.63 (0.00, 1.87)
No Indigenous group	16	464	0.83 (0.76, 0.91)	903	1.55 (1.45, 1.65)
Mapuche	17	34	0.68 (0.45, 0.90)	71	1.35 (1.04, 1.66)
Other Indigenous group	17	2	1.34 (0.00, 3.19)	0	0.00 (0.00, 0.00)
No Indigenous group	17	444	0.79 (0.72, 0.87)	809	1.41 (1.31, 1.50)
Mapuche	18	12	0.61 (0.27, 0.96)	24	0.96 (0.58, 1.35)
Other Indigenous group	18	0	0.00 (0.00, 0.00)	0	0.00 (0.00, 0.00)
No Indigenous group	18	183	0.95 (0.81, 1.08)	379	1.49 (1.34, 1.64)

Autism and ADHD are slightly more prevalent for students at rural schools and both follow the same age patterns observed earlier.

5.2 Frequentist prevalence estimation

After using frequentist methods to adjust for the age and sex distribution of the child population of Chile in 2021, the adjusted prevalence of autism was 0.465% (0.457-0.473%) and the adjusted prevalence of ADHD was 1.50% (1.48-1.51%). Among females, the adjusted prevalence of autism was 0.131% (0.125-0.138%) and among males it was 0.787% (0.773-0.801%). Among females, the adjusted prevalence of ADHD was 1.01% (1.00-1.03%) and among males it was 1.97% (1.94-1.99%).

As we know the prevalences of autism and ADHD in this data are likely to be underestimates, the age- and sex-adjusted prevalences can be considered a lower bound on the true prevalence of autism and of ADHD in Chile. Considering school data by health service, the adjusted prevalence of autism is much higher in Ñuble at 1.29% (1.21 - 1.37%) than other health services and is low in rural areas such as Araucanía. It is also low in the Metropolitano health services which serve Santiago, Chile's largest city. Adjusted ADHD prevalence is medial for Metropolitano health services and very low for Atacama, a fairly urbanised region, at 0.49% (0.43 - 0.56%).

Table 2: Count and prevalence of ADHD cases by age in Chile school data with normal confidence intervals.

Age	ADHD cases	Prevalence % (95% CI)
6	740	0.29 (0.27, 0.32)
7	1965	0.78 (0.75, 0.82)
8	3231	1.31 (1.27, 1.36)
9	4500	1.78 (1.73, 1.83)
10	5485	2.13 (2.07, 2.18)
11	5564	2.17 (2.11, 2.23)
12	5325	2.07 (2.01, 2.12)
13	4848	1.94 (1.88, 1.99)
14	3926	1.62 (1.57, 1.67)
15	3420	1.45 (1.40, 1.50)
16	3120	1.33 (1.28, 1.38)
17	2870	1.23 (1.19, 1.28)
18	1230	1.40 (1.33, 1.48)

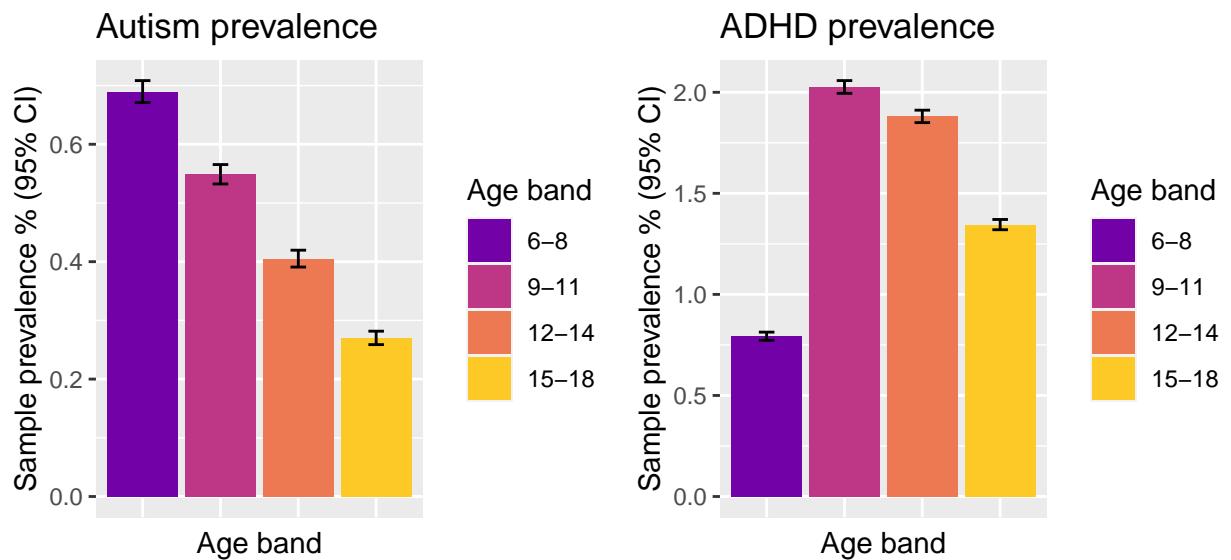


Figure 5: Sample prevalence of autism and ADHD by age band. Bars show 95% normal confidence intervals.

Table 3: Count and prevalence of autism cases by age in Chile school data for females and males with normal confidence intervals.

Age	Female		Male	
	Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
6	294	0.24 (0.21, 0.27)	1512	1.18 (1.12, 1.24)
7	241	0.20 (0.17, 0.22)	1483	1.15 (1.10, 1.21)
8	239	0.20 (0.17, 0.22)	1393	1.11 (1.05, 1.16)
9	198	0.16 (0.14, 0.18)	1325	1.02 (0.97, 1.08)
10	162	0.13 (0.11, 0.15)	1273	0.96 (0.91, 1.01)
11	163	0.13 (0.11, 0.15)	1091	0.83 (0.78, 0.88)
12	134	0.11 (0.09, 0.12)	1042	0.79 (0.74, 0.84)
13	145	0.12 (0.10, 0.14)	912	0.71 (0.66, 0.76)
14	112	0.09 (0.08, 0.11)	693	0.56 (0.52, 0.60)
15	96	0.08 (0.07, 0.10)	584	0.48 (0.44, 0.52)
16	100	0.09 (0.07, 0.10)	565	0.47 (0.43, 0.51)
17	55	0.05 (0.04, 0.06)	436	0.37 (0.33, 0.40)
18	39	0.10 (0.07, 0.14)	262	0.52 (0.46, 0.59)

Table 4: Count and prevalence of ADHD cases by age in Chile school data for females and males with normal confidence intervals.

Age	Female		Male	
	ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
6	294	0.24 (0.21, 0.27)	478	0.37 (0.34, 0.41)
7	241	0.20 (0.17, 0.22)	1315	1.02 (0.97, 1.08)
8	239	0.20 (0.17, 0.22)	2151	1.71 (1.64, 1.78)
9	198	0.16 (0.14, 0.18)	2967	2.29 (2.21, 2.37)
10	162	0.13 (0.11, 0.15)	3664	2.77 (2.68, 2.86)
11	163	0.13 (0.11, 0.15)	3691	2.81 (2.72, 2.90)
12	134	0.11 (0.09, 0.12)	3582	2.72 (2.63, 2.81)
13	145	0.12 (0.10, 0.14)	3376	2.63 (2.54, 2.72)
14	112	0.09 (0.08, 0.11)	2756	2.23 (2.15, 2.31)
15	96	0.08 (0.07, 0.10)	2352	1.95 (1.87, 2.02)
16	100	0.09 (0.07, 0.10)	2097	1.75 (1.67, 1.82)
17	55	0.05 (0.04, 0.06)	1876	1.58 (1.51, 1.65)
18	39	0.10 (0.07, 0.14)	840	1.68 (1.57, 1.79)

Table 11: Count and prevalence of Autism cases by school's rurality and age in Chile school data for females and males with normal confidence intervals.

School rurality	Age	Female		Male	
		Autism cases	Prevalence % (95% CI)	Autism cases	Prevalence % (95% CI)
Rural	6	33	0.28 (0.19, 0.38)	168	1.33 (1.13, 1.53)
Urban	6	261	0.23 (0.21, 0.26)	1344	1.16 (1.10, 1.22)
Rural	7	31	0.26 (0.17, 0.35)	184	1.37 (1.17, 1.56)
Urban	7	210	0.19 (0.17, 0.22)	1299	1.13 (1.07, 1.19)
Rural	8	29	0.24 (0.15, 0.33)	167	1.30 (1.10, 1.49)
Urban	8	210	0.19 (0.17, 0.22)	1226	1.08 (1.02, 1.14)
Rural	9	26	0.21 (0.13, 0.29)	166	1.24 (1.05, 1.43)
Urban	9	172	0.16 (0.13, 0.18)	1159	1.00 (0.94, 1.06)
Rural	10	13	0.10 (0.05, 0.16)	157	1.12 (0.94, 1.29)
Urban	10	149	0.13 (0.11, 0.15)	1116	0.94 (0.89, 1.00)
Rural	11	22	0.17 (0.10, 0.24)	149	1.06 (0.89, 1.23)
Urban	11	141	0.13 (0.10, 0.15)	942	0.80 (0.75, 0.85)
Rural	12	20	0.17 (0.10, 0.25)	120	0.93 (0.76, 1.09)
Urban	12	114	0.10 (0.08, 0.12)	922	0.78 (0.73, 0.83)
Rural	13	20	0.19 (0.11, 0.27)	107	0.89 (0.72, 1.06)
Urban	13	125	0.11 (0.09, 0.13)	805	0.69 (0.64, 0.74)
Rural	14	4	0.09 (0.00, 0.17)	64	1.00 (0.75, 1.24)
Urban	14	108	0.10 (0.08, 0.11)	629	0.54 (0.49, 0.58)
Rural	15	2	0.05 (0.00, 0.13)	35	0.72 (0.48, 0.96)
Urban	15	94	0.08 (0.07, 0.10)	549	0.47 (0.43, 0.51)
Rural	16	6	0.17 (0.04, 0.31)	30	0.70 (0.45, 0.95)
Urban	16	94	0.08 (0.07, 0.10)	535	0.46 (0.42, 0.50)
Rural	17	0	0.00 (0.00, 0.00)	16	0.39 (0.20, 0.58)
Urban	17	55	0.05 (0.04, 0.06)	420	0.37 (0.33, 0.40)
Rural	18	1	0.08 (0.00, 0.25)	11	0.59 (0.24, 0.94)
Urban	18	38	0.10 (0.07, 0.14)	251	0.52 (0.46, 0.59)

Table 12: Count and prevalence of ADHD cases by school's rurality and age in Chile school data for females and males with normal confidence intervals.

School rurality	Age	Female		Male	
		ADHD cases	Prevalence % (95% CI)	ADHD cases	Prevalence % (95% CI)
Rural	6	25	0.21 (0.13, 0.30)	65	0.52 (0.39, 0.64)
Urban	6	237	0.21 (0.19, 0.24)	413	0.36 (0.32, 0.39)
Rural	7	58	0.48 (0.36, 0.60)	172	1.28 (1.09, 1.47)
Urban	7	592	0.54 (0.50, 0.58)	1143	0.99 (0.94, 1.05)
Rural	8	138	1.14 (0.95, 1.33)	266	2.06 (1.82, 2.31)
Urban	8	942	0.87 (0.81, 0.92)	1885	1.67 (1.59, 1.74)
Rural	9	155	1.26 (1.06, 1.45)	382	2.85 (2.57, 3.13)
Urban	9	1378	1.24 (1.18, 1.31)	2585	2.23 (2.14, 2.31)
Rural	10	177	1.41 (1.20, 1.61)	483	3.43 (3.13, 3.74)
Urban	10	1644	1.45 (1.38, 1.52)	3181	2.69 (2.60, 2.78)
Rural	11	200	1.56 (1.35, 1.78)	439	3.12 (2.84, 3.41)
Urban	11	1673	1.49 (1.42, 1.56)	3252	2.77 (2.68, 2.87)
Rural	12	141	1.23 (1.03, 1.43)	402	3.10 (2.80, 3.40)
Urban	12	1602	1.40 (1.34, 1.47)	3180	2.68 (2.59, 2.77)
Rural	13	123	1.16 (0.96, 1.37)	344	2.87 (2.57, 3.17)
Urban	13	1349	1.21 (1.15, 1.27)	3032	2.61 (2.51, 2.70)
Rural	14	59	1.26 (0.94, 1.58)	200	3.11 (2.69, 3.54)
Urban	14	1111	0.98 (0.92, 1.04)	2556	2.18 (2.10, 2.26)
Rural	15	45	1.21 (0.86, 1.56)	106	2.18 (1.77, 2.60)
Urban	15	1023	0.92 (0.86, 0.98)	2246	1.94 (1.86, 2.01)
Rural	16	29	0.84 (0.54, 1.15)	81	1.88 (1.48, 2.29)
Urban	16	994	0.89 (0.84, 0.95)	2016	1.74 (1.67, 1.82)
Rural	17	30	0.93 (0.60, 1.26)	71	1.74 (1.34, 2.14)
Urban	17	964	0.87 (0.81, 0.92)	1805	1.58 (1.51, 1.65)
Rural	18	8	0.67 (0.21, 1.13)	29	1.55 (0.99, 2.11)
Urban	18	382	1.05 (0.95, 1.16)	811	1.68 (1.57, 1.80)

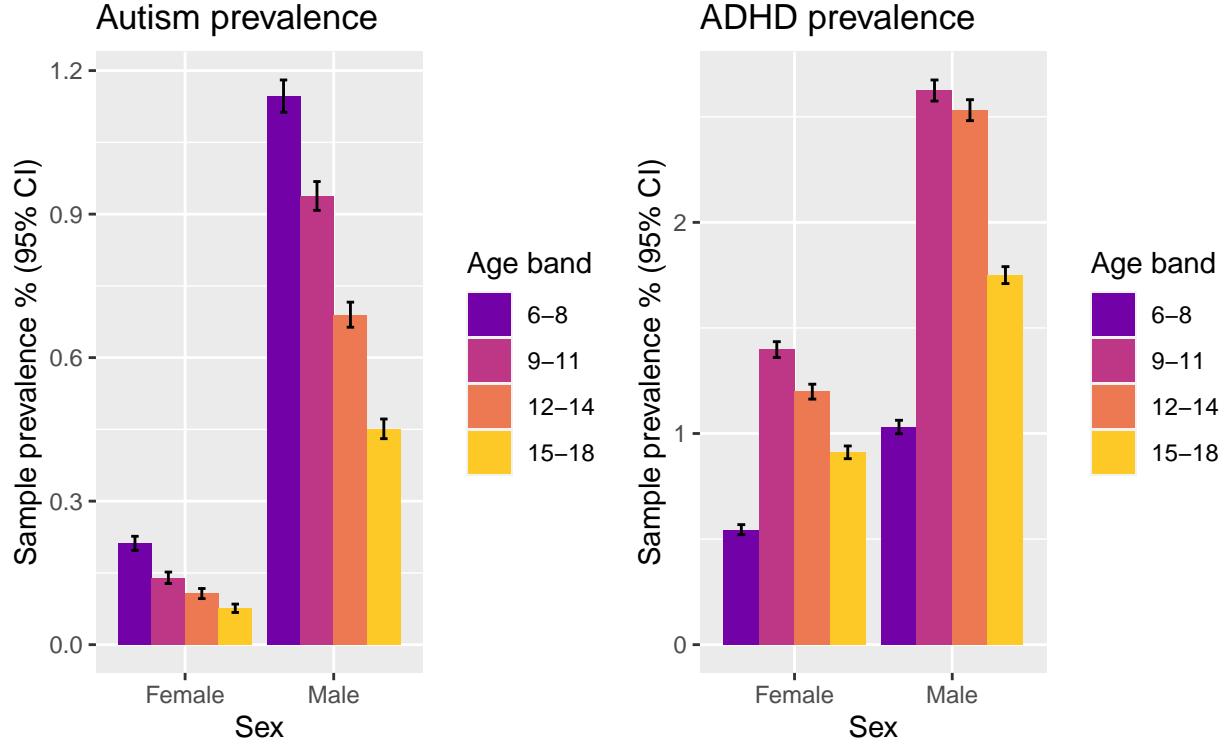


Figure 6: Sample prevalence of autism and ADHD by age band and sex. Bars show 95% normal confidence intervals.

Table 13: Crude and age- and sex-adjusted autism prevalence by health service in Chile school data. Crude prevalence has 95% normal confidence intervals and adjusted prevalence has 95% gamma confidence intervals.

Health service	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Aconcagua	0.44 (0.38, 0.50)	0.43 (0.37, 0.50)
Aisén	0.75 (0.63, 0.87)	0.75 (0.63, 0.90)
Antofagasta	0.84 (0.79, 0.89)	0.83 (0.77, 0.88)
Araucanía Norte	0.30 (0.24, 0.36)	0.30 (0.24, 0.38)
Araucanía Sur	0.37 (0.34, 0.40)	0.37 (0.34, 0.41)
Arauco	0.73 (0.64, 0.83)	0.72 (0.62, 0.82)
Arica	0.61 (0.54, 0.68)	0.61 (0.54, 0.70)
Atacama	0.31 (0.26, 0.35)	0.31 (0.27, 0.37)
Biobío	0.43 (0.38, 0.48)	0.42 (0.37, 0.47)
Chiloé	0.45 (0.38, 0.52)	0.43 (0.36, 0.52)
Concepción	0.78 (0.73, 0.84)	0.77 (0.72, 0.83)
Coquimbo	0.41 (0.38, 0.45)	0.40 (0.36, 0.43)
Libertador B.O'Higgins	0.43 (0.40, 0.47)	0.42 (0.39, 0.46)
Maule	0.31 (0.28, 0.33)	0.30 (0.28, 0.33)
Reloncaví	0.42 (0.38, 0.47)	0.42 (0.37, 0.47)
Iquique	0.45 (0.40, 0.50)	0.43 (0.38, 0.49)
Magallanes	0.83 (0.72, 0.94)	0.83 (0.72, 0.96)
Metropolitano Central	0.42 (0.38, 0.46)	0.42 (0.38, 0.46)
Metropolitano Norte	0.29 (0.27, 0.32)	0.29 (0.26, 0.31)

Health service	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Metropolitano Occidente	0.36 (0.34, 0.38)	0.34 (0.32, 0.36)
Metropolitano Oriente	0.30 (0.28, 0.33)	0.30 (0.27, 0.33)
Metropolitano Sur	0.41 (0.39, 0.44)	0.40 (0.37, 0.43)
Metropolitano Sur Oriente	0.37 (0.34, 0.39)	0.36 (0.34, 0.39)
Osorno	0.44 (0.38, 0.51)	0.43 (0.37, 0.51)
Talcahuano	0.84 (0.76, 0.92)	0.81 (0.74, 0.90)
Valdivia	0.31 (0.27, 0.35)	0.30 (0.26, 0.35)
Valparaíso San Antonio	0.69 (0.64, 0.75)	0.68 (0.62, 0.75)
Viña del Mar Quillota	0.67 (0.63, 0.71)	0.66 (0.62, 0.70)
Ñuble	1.32 (1.24, 1.40)	1.29 (1.21, 1.37)

Table 14: Crude and age- and sex-adjusted ADHD prevalence by health service in Chile school data. Crude prevalence has 95% normal confidence intervals and adjusted prevalence has 95% gamma confidence intervals.

Health service	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Aconcagua	2.08 (1.95, 2.21)	2.04 (1.91, 2.19)
Aisén	2.23 (2.03, 2.44)	2.17 (1.97, 2.40)
Antofagasta	1.00 (0.94, 1.06)	0.98 (0.93, 1.04)
Araucanía Norte	1.33 (1.22, 1.45)	1.29 (1.18, 1.43)
Araucanía Sur	1.42 (1.36, 1.49)	1.38 (1.32, 1.45)
Arauco	1.64 (1.50, 1.78)	1.64 (1.50, 1.81)
Arica	1.14 (1.04, 1.24)	1.12 (1.02, 1.24)
Atacama	0.49 (0.44, 0.55)	0.49 (0.43, 0.56)
Biobío	2.27 (2.16, 2.38)	2.26 (2.15, 2.38)
Chiloé	2.96 (2.77, 3.15)	2.87 (2.68, 3.07)
Concepción	2.94 (2.84, 3.04)	3.00 (2.89, 3.11)
Coquimbo	1.98 (1.91, 2.05)	2.00 (1.92, 2.08)
Libertador B.O'Higgins	1.73 (1.66, 1.79)	1.69 (1.63, 1.76)
Maule	1.19 (1.14, 1.24)	1.15 (1.11, 1.21)
Reloncaví	1.02 (0.95, 1.09)	0.99 (0.92, 1.07)
Iquique	1.49 (1.40, 1.58)	1.50 (1.40, 1.60)
Magallanes	3.07 (2.87, 3.27)	3.06 (2.85, 3.29)
Metropolitano Central	1.53 (1.46, 1.59)	1.49 (1.43, 1.57)
Metropolitano Norte	1.42 (1.36, 1.47)	1.42 (1.36, 1.48)
Metropolitano Occidente	1.09 (1.05, 1.13)	1.12 (1.08, 1.17)
Metropolitano Oriente	1.21 (1.16, 1.26)	1.20 (1.15, 1.25)
Metropolitano Sur	1.42 (1.37, 1.48)	1.41 (1.35, 1.46)
Metropolitano Sur Oriente	1.56 (1.51, 1.61)	1.53 (1.48, 1.58)
Osorno	1.05 (0.95, 1.14)	1.02 (0.92, 1.13)
Talcahuano	3.07 (2.93, 3.22)	3.02 (2.87, 3.18)
Valdivia	1.08 (1.00, 1.16)	1.06 (0.98, 1.15)
Valparaíso San Antonio	1.21 (1.13, 1.29)	1.21 (1.13, 1.29)
Viña del Mar Quillota	1.17 (1.12, 1.22)	1.15 (1.10, 1.20)
Ñuble	2.12 (2.02, 2.22)	2.11 (2.00, 2.22)

For autism and ADHD, Adjusted prevalences by school fees, ethnicity and school's rurality show similar patterns to crude prevalences, except for students at rural schools which have notably lower adjusted prevalence for both conditions. See tables x, x, x, x, x, and x. These results indicate that there are differences in the prevalence of autism and of ADHD across location and demographic features.

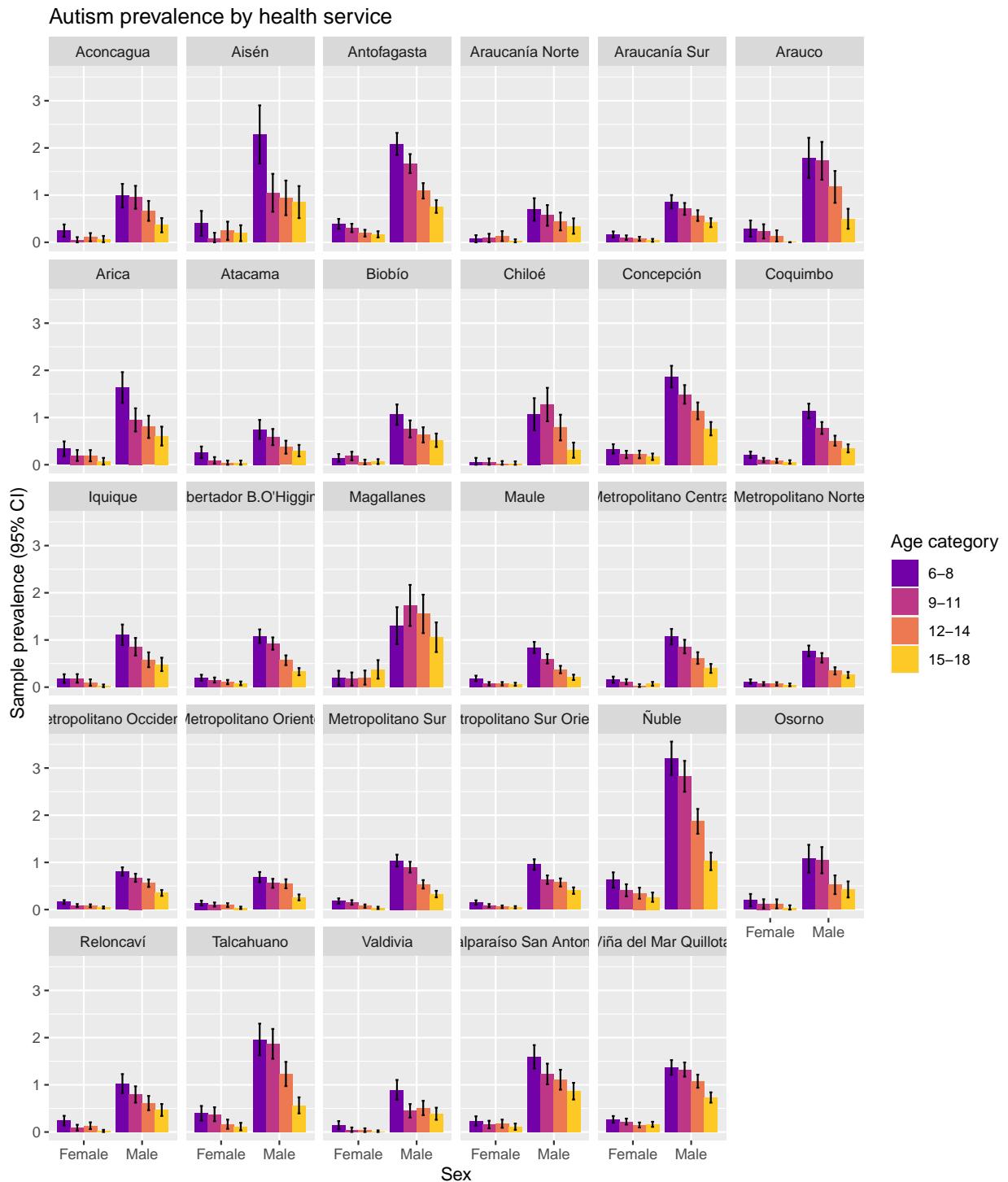


Figure 7: Sample prevalence of autism by health service, age band and sex. Bars show 95% normal confidence intervals.

ADHD prevalence by health service

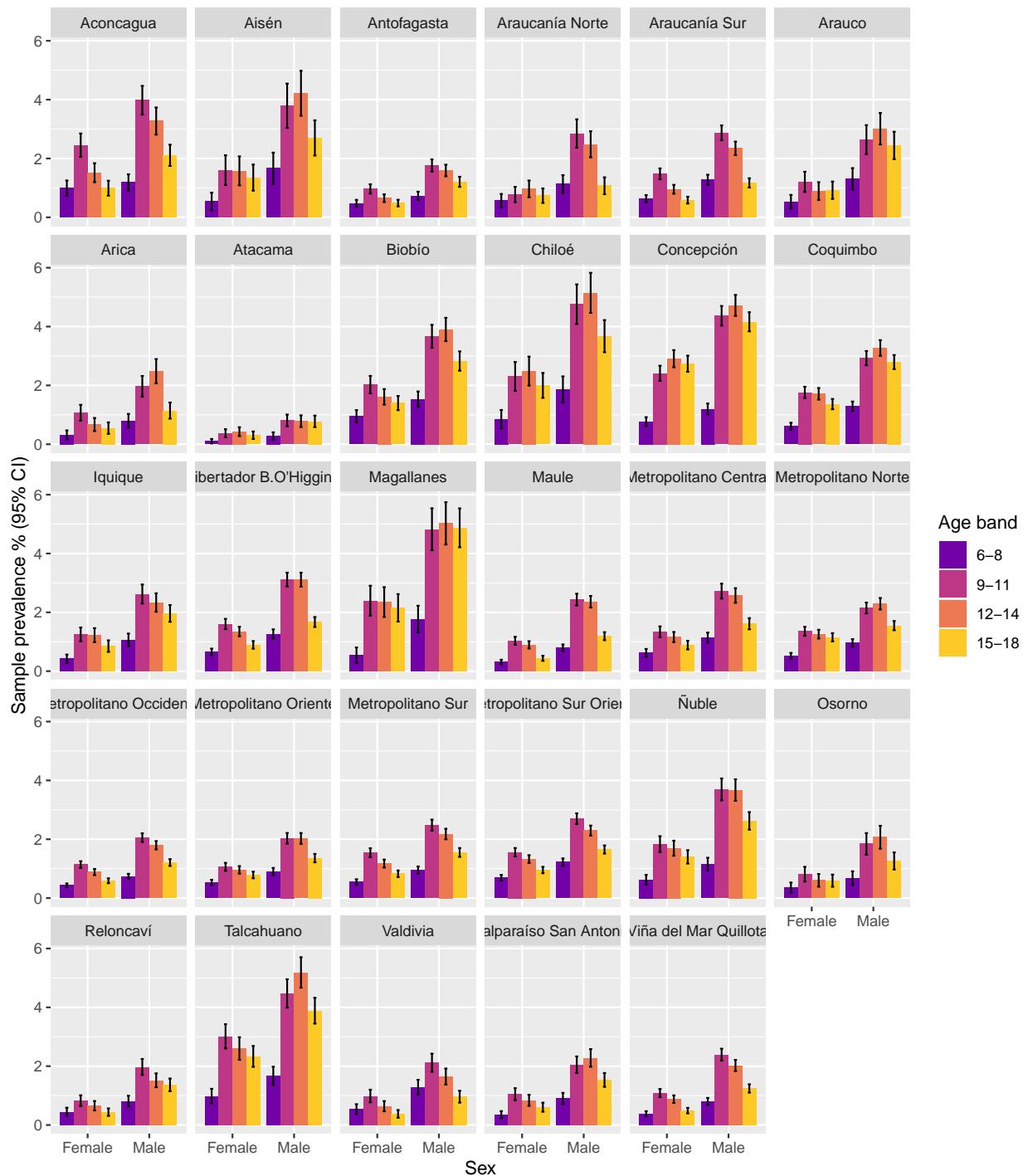


Figure 8: Sample prevalence of ADHD by health service, age band and sex. Bars show 95% normal confidence intervals.

Autism prevalence by school fee

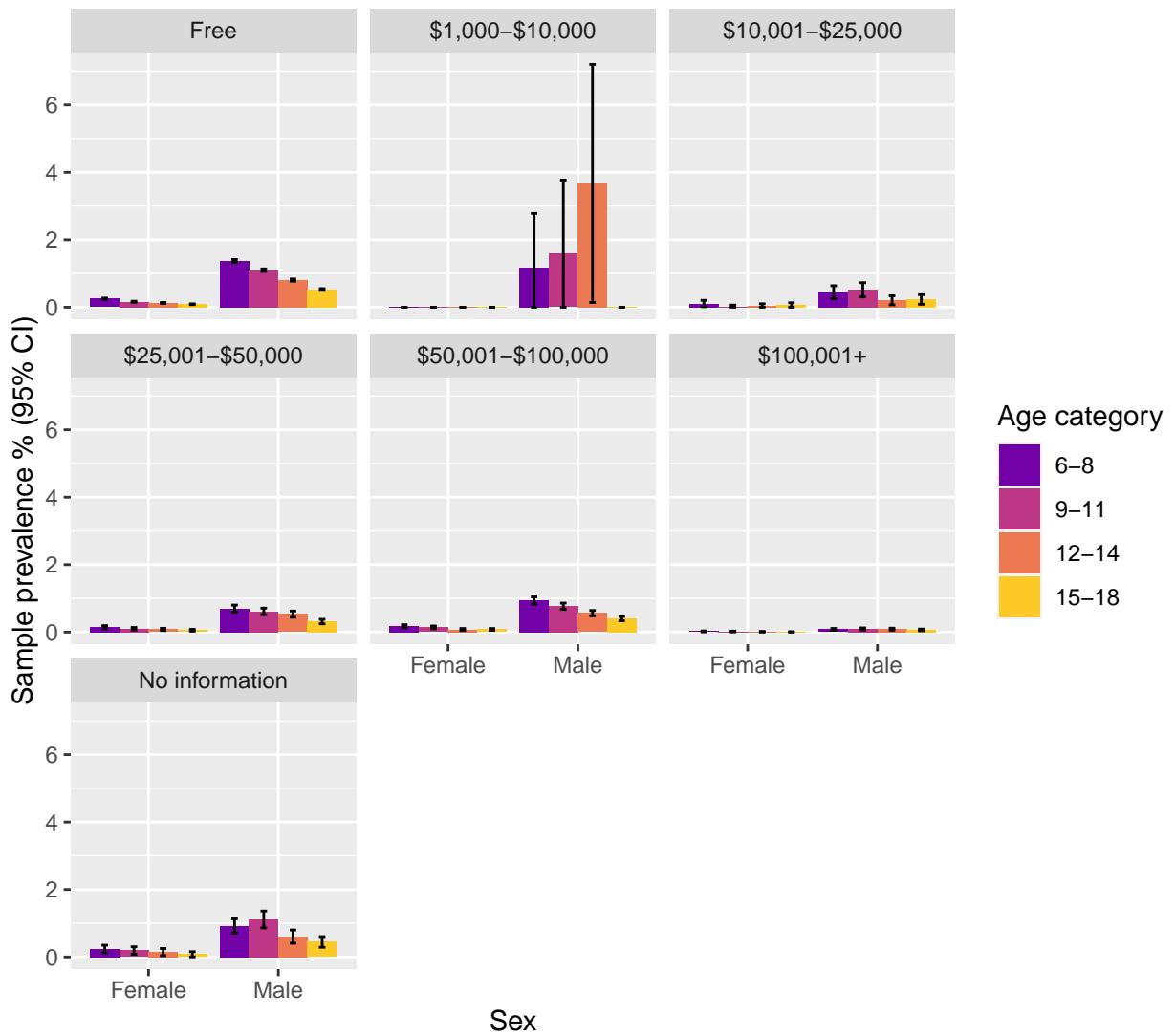


Figure 9: Sample prevalence of autism by student's monthly school fee (Peso), age band and sex. Bars show 95% normal confidence intervals.

ADHD prevalence by school fee

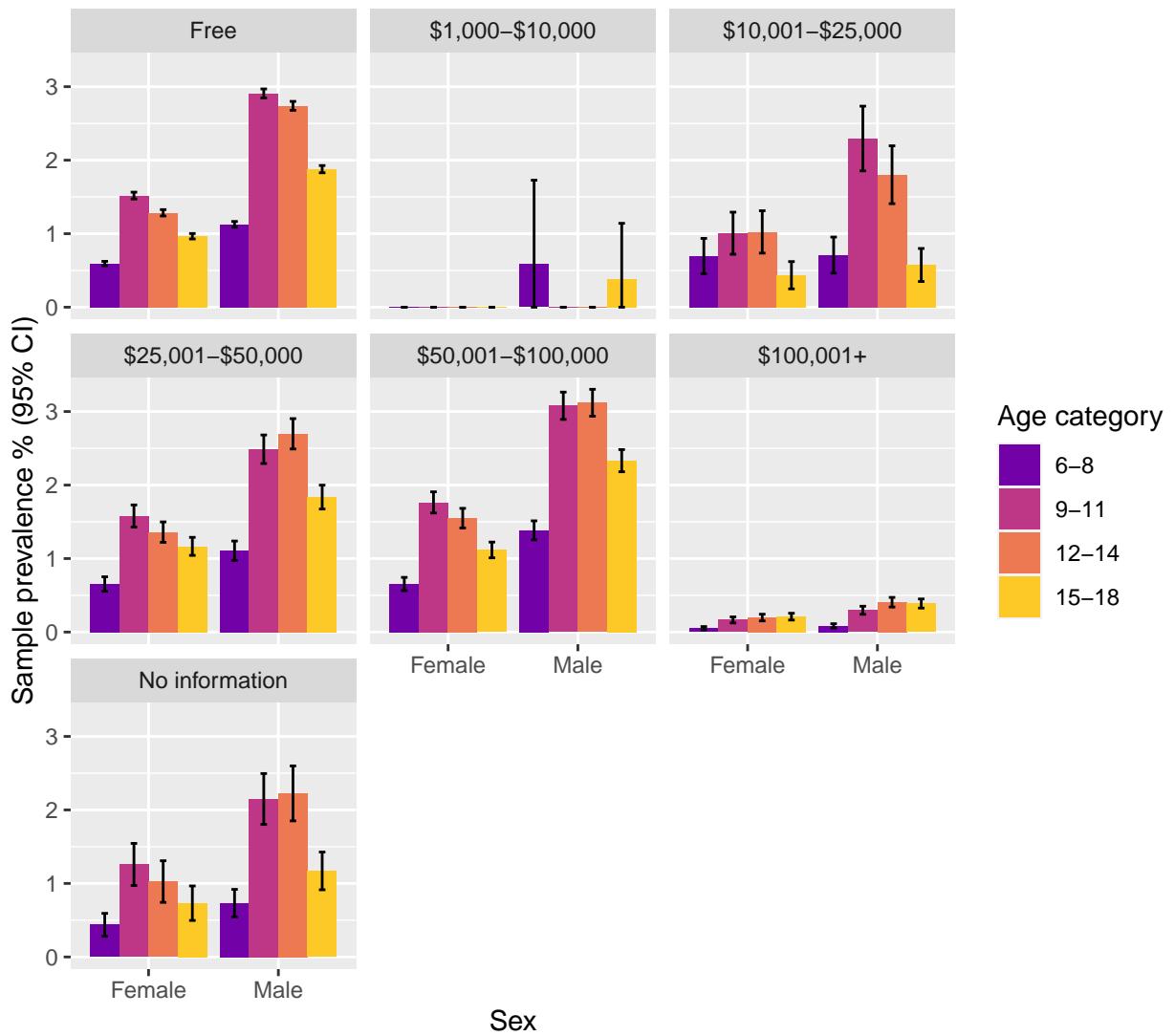


Figure 10: Sample prevalence of ADHD by student's monthly school fee (Peso), age band and sex. Bars show 95% normal confidence intervals.

Autism prevalence by ethnicity

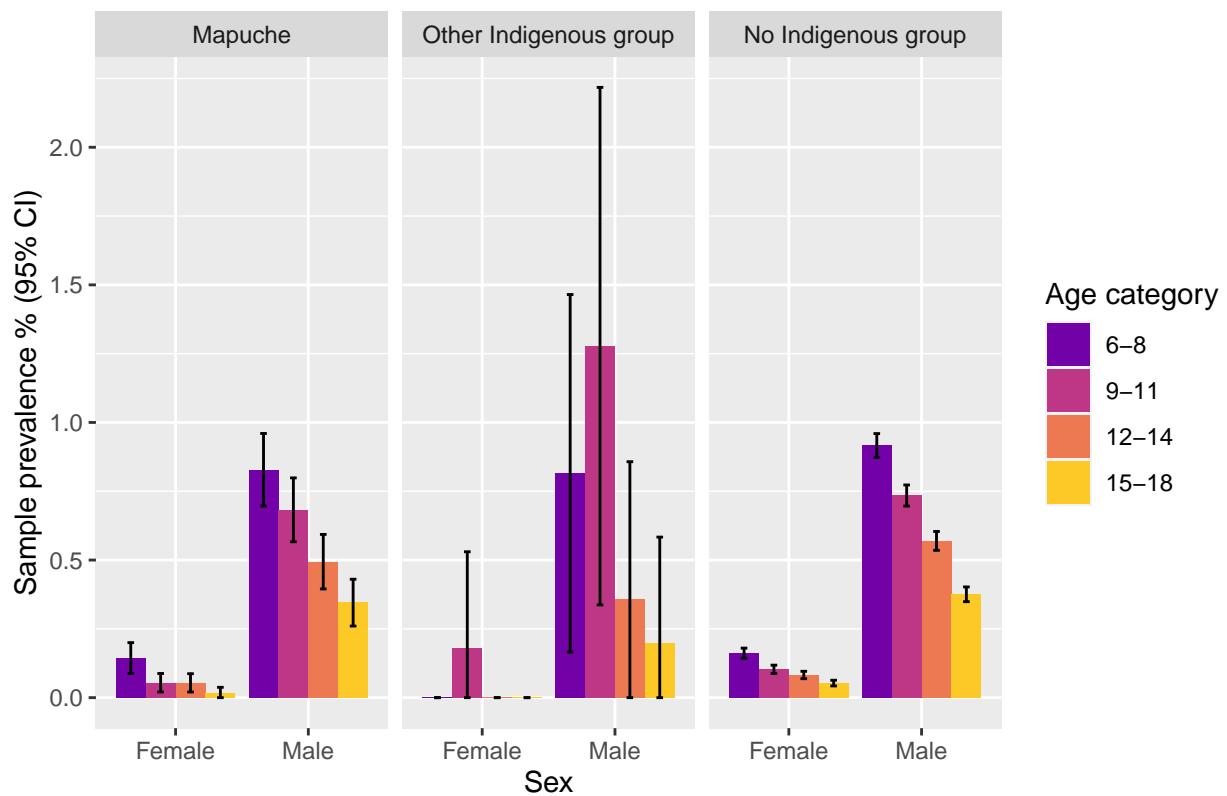


Figure 11: Sample prevalence of autism by ethnicity, age band and sex. Bars show 95% normal confidence intervals. Regions with high Mapuche populations only.

ADHD prevalence by ethnicity

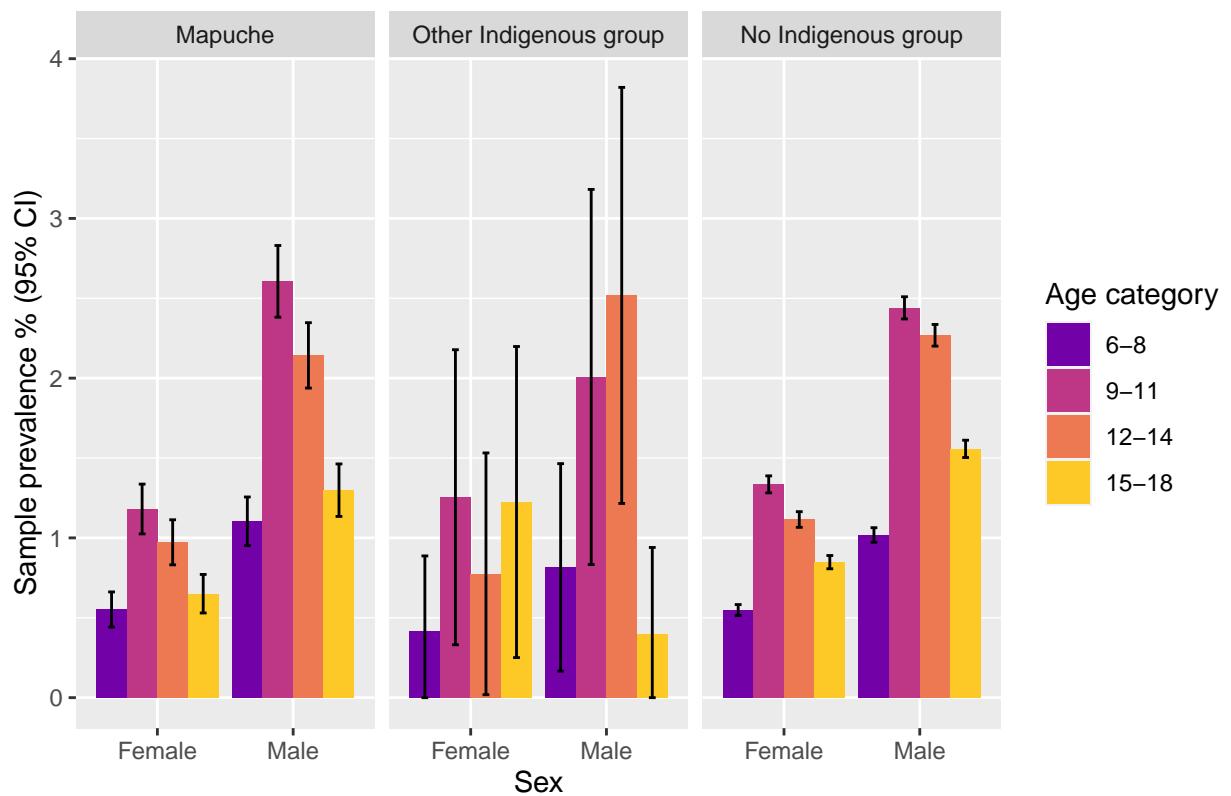


Figure 12: Sample prevalence of ADHD by ethnicity, age band and sex. Bars show 95% normal confidence intervals. Regions with high Mapuche populations only.

Autism prevalence by school's rurality

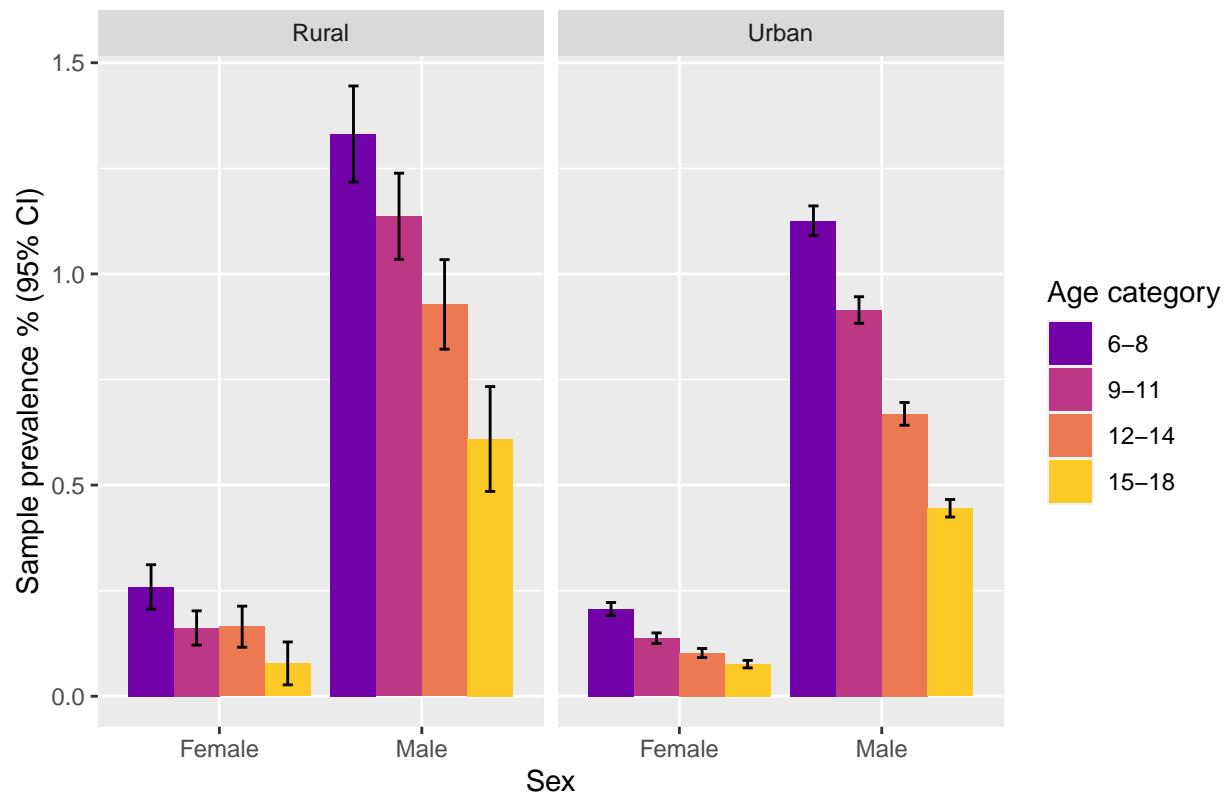


Figure 13: Sample prevalence of autism by school's rurality, age band and sex. Bars show 95% normal confidence intervals.

ADHD prevalence by school's rurality

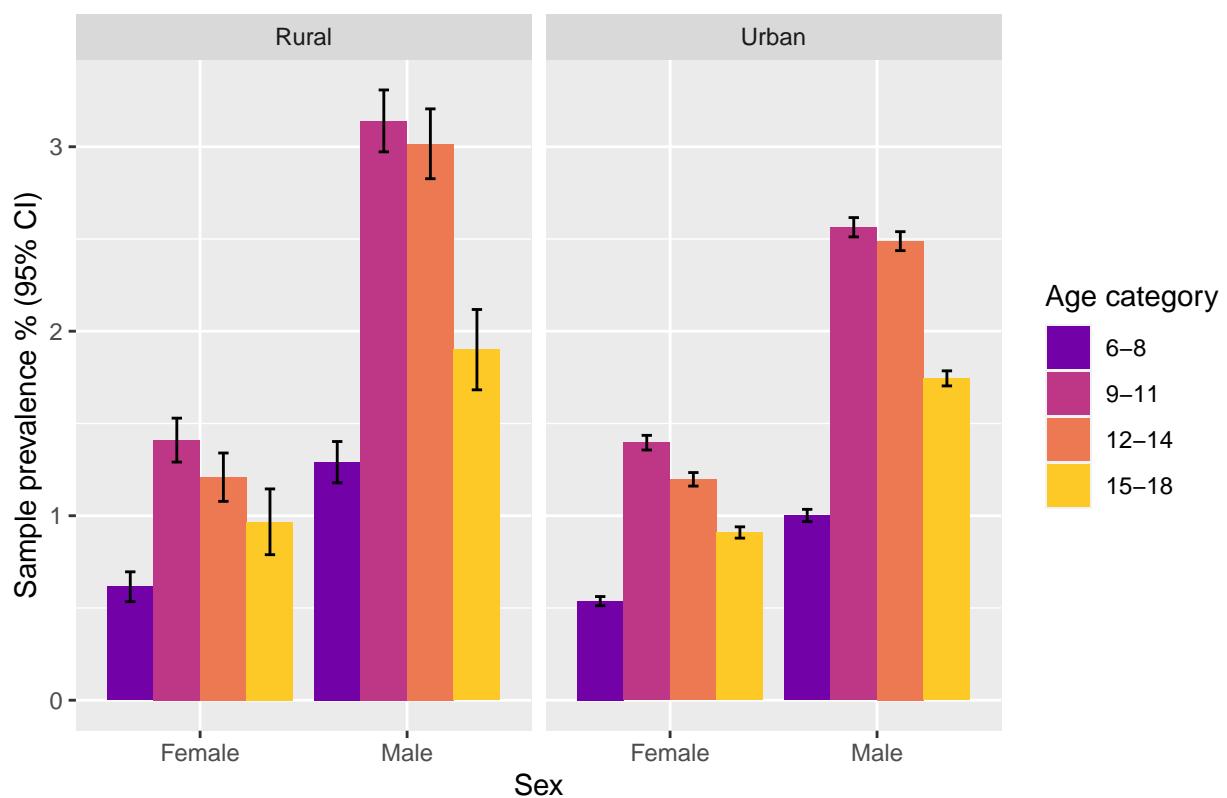


Figure 14: Sample prevalence of ADHD by school's rurality, age band and sex. Bars show 95% normal confidence intervals.

\begin{table}

\caption{Crude and age- and sex-adjusted autism prevalence by monthly school fee (Peso) in Chile school data. Crude prevalence has 95% normal confidence intervals and adjusted prevalence has 95% gamma confidence intervals.}

School fee	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Free	0.57 (0.56, 0.58)	0.55 (0.54, 0.56)
\$1,000-\$10,000	0.71 (0.22, 1.21)	0.69 (0.29, 3.25)
\$10,001-\$25,000	0.20 (0.15, 0.25)	0.20 (0.16, 0.27)
\$25,001-\$50,000	0.30 (0.28, 0.33)	0.32 (0.29, 0.34)
\$50,001-\$100,000	0.39 (0.36, 0.41)	0.40 (0.37, 0.43)
\$100,001+	0.05 (0.04, 0.05)	0.05 (0.04, 0.06)
No information	0.50 (0.44, 0.57)	0.46 (0.40, 0.52)

\end{table}

\begin{table}

\caption{Crude and age- and sex-adjusted ADHD prevalence by monthly school fee (Peso) in Chile school data. Crude prevalence has 95% normal confidence intervals and adjusted prevalence has 95% gamma confidence intervals.}

School fee	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Free	1.65 (1.63, 1.67)	1.62 (1.60, 1.64)
\$1,000-\$10,000	0.18 (0.00, 0.43)	0.11 (0.01, 2.74)
\$10,001-\$25,000	1.06 (0.95, 1.16)	1.05 (0.94, 1.17)
\$25,001-\$50,000	1.59 (1.54, 1.65)	1.65 (1.59, 1.72)
\$50,001-\$100,000	1.90 (1.84, 1.95)	1.90 (1.84, 1.96)
\$100,001+	0.22 (0.21, 0.24)	0.23 (0.21, 0.25)
No information	1.21 (1.11, 1.31)	1.22 (1.13, 1.33)

\end{table}

\begin{table}

\caption{Crude and age- and sex-adjusted autism prevalence by ethnicity in Chile school data. Crude prevalence has 95% normal confidence intervals and adjusted prevalence has 95% gamma confidence intervals.}

Ethnicity	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Mapuche	0.33 (0.30, 0.36)	0.32 (0.29, 0.35)
Other Indigenous group	0.37 (0.19, 0.54)	0.38 (0.21, 0.77)
No Indigenous group	0.38 (0.37, 0.39)	0.37 (0.36, 0.38)

\end{table}

\begin{table}

\caption{Crude and age- and sex-adjusted ADHD prevalence by ethnicity in Chile school data. Crude prevalence has 95% normal confidence intervals and adjusted prevalence has 95% gamma confidence intervals.}

Ethnicity	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Mapuche	1.34 (1.28, 1.40)	1.29 (1.23, 1.35)
Other Indigenous group	1.14 (0.84, 1.45)	1.13 (0.85, 1.59)
No Indigenous group	1.40 (1.38, 1.42)	1.39 (1.37, 1.41)

\end{table}

\begin{table}

\caption{Crude and age- and sex-adjusted autism prevalence by school's rurality in Chile school data. Crude prevalence has 95% normal confidence intervals and adjusted prevalence has 95% gamma confidence intervals.}

School rurality	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Rural	0.66 (0.63, 0.69)	0.57 (0.54, 0.61)
Urban	0.46 (0.45, 0.47)	0.46 (0.45, 0.46)

\end{table}

\begin{table}

\caption{Crude and age- and sex-adjusted ADHD prevalence by school's rurality in Chile school data. Crude prevalence has 95% normal confidence intervals and adjusted prevalence has 95% gamma confidence intervals.}

School rurality	Crude prevalence (95% CI)	Adjusted prevalence (95% CI)
Rural	1.77 (1.72, 1.82)	1.67 (1.61, 1.74)
Urban	1.49 (1.48, 1.50)	1.48 (1.47, 1.50)

\end{table}

5.3 Clinical data

The small clinical dataset has data on 2263 appointments for 405 unique patients aged 1-18 in 2021. 106 (26.17%) are female, 18 (4.44%) are Mapuche, 0 (0%) live in an urban area, 29 (7.16%) have a disability and 15 (3.7%) have experienced foster care. 0 (0%) patients have autism, 0 (0%) have an intellectual disability and 0 (0%).

TODO - table summarising data content. Number of unique patients

5.4 Multiple Correspondence Analysis

5.5 Probabilistic data linkage

NB: there are 1688 unique ID's in patients and it's 1702 rows long because some people are represented in 2 communes.

5.5.1 Number matched

Using perfect match on sex, date of birth and commune of residence, 197 matches can be found between the school and patient records. 187 unique school records can be perfectly matched to clinical records. 193 patients can be linked to school records.

There are no patients that lived in different communes therefore were in the patient dataset twice that are matched to multiple school records.

Table 15: Count and percentage of features' values in the small clinical dataset.

Feature	Available values	Count (%)
Sex	Female	106 (26.17%)
Sex	Male	299 (73.83%)
Age band	Age 0-2	13 (3.21%)
Age band	Age 3-5	57 (14.07%)
Age band	Age 6-8	58 (14.32%)
Age band	Age 9-11	95 (23.46%)
Age band	Age 12-14	87 (21.48%)
Age band	Age 15-18	95 (23.46%)
Private health level	FONASA - A	197 (48.64%)
Private health level	FONASA - B	106 (26.17%)
Private health level	FONASA - C	43 (10.62%)
Private health level	FONASA - D	51 (12.59%)
Private health level	Private Health Insurance	8 (1.98%)
Commune	Algarrobo	1 (0.25%)
Commune	Cabo de Hornos	1 (0.25%)
Commune	Curarrehue	11 (2.72%)
Commune	Freire	4 (0.99%)
Commune	Gorbea	1 (0.25%)
Commune	Hijuelas	1 (0.25%)
Commune	Loncoche	73 (18.02%)
Commune	Machalí	1 (0.25%)
Commune	Nueva Imperial	1 (0.25%)
Commune	Panguipulli	1 (0.25%)
Commune	Pencahue	1 (0.25%)
Commune	Pica	1 (0.25%)
Commune	Pitrufquén	3 (0.74%)
Commune	Pucón	84 (20.74%)
Commune	Quinta Normal	1 (0.25%)
Commune	Temuco	10 (2.47%)
Commune	Teodoro Schmidt	1 (0.25%)
Commune	Tocopilla	1 (0.25%)
Commune	Toltén	1 (0.25%)
Commune	Villarrica	207 (51.11%)
Rurality	Rural	55 (13.58%)
Rurality	Urban	350 (86.42%)
Ethnicity	Mapuche	18 (4.44%)
Ethnicity	Chilean	246 (60.74%)
Ethnicity	Foreign	36 (8.89%)
Ethnicity	No ethnicity information	105 (25.93%)
Disability	Yes disability	29 (7.16%)
Disability	No disability	104 (25.68%)
Disability	No disability information	272 (67.16%)
Foster care	Yes foster care	15 (3.70%)
Foster care	No foster care	118 (29.14%)
Foster care	No foster care information	272 (67.16%)
Autism	Yes autism	253 (62.47%)
Autism	No autism	152 (37.53%)
Intellectual disability	Yes intellectual disability	175 (43.21%)
Intellectual disability	No intellectual disability	230 (56.79%)

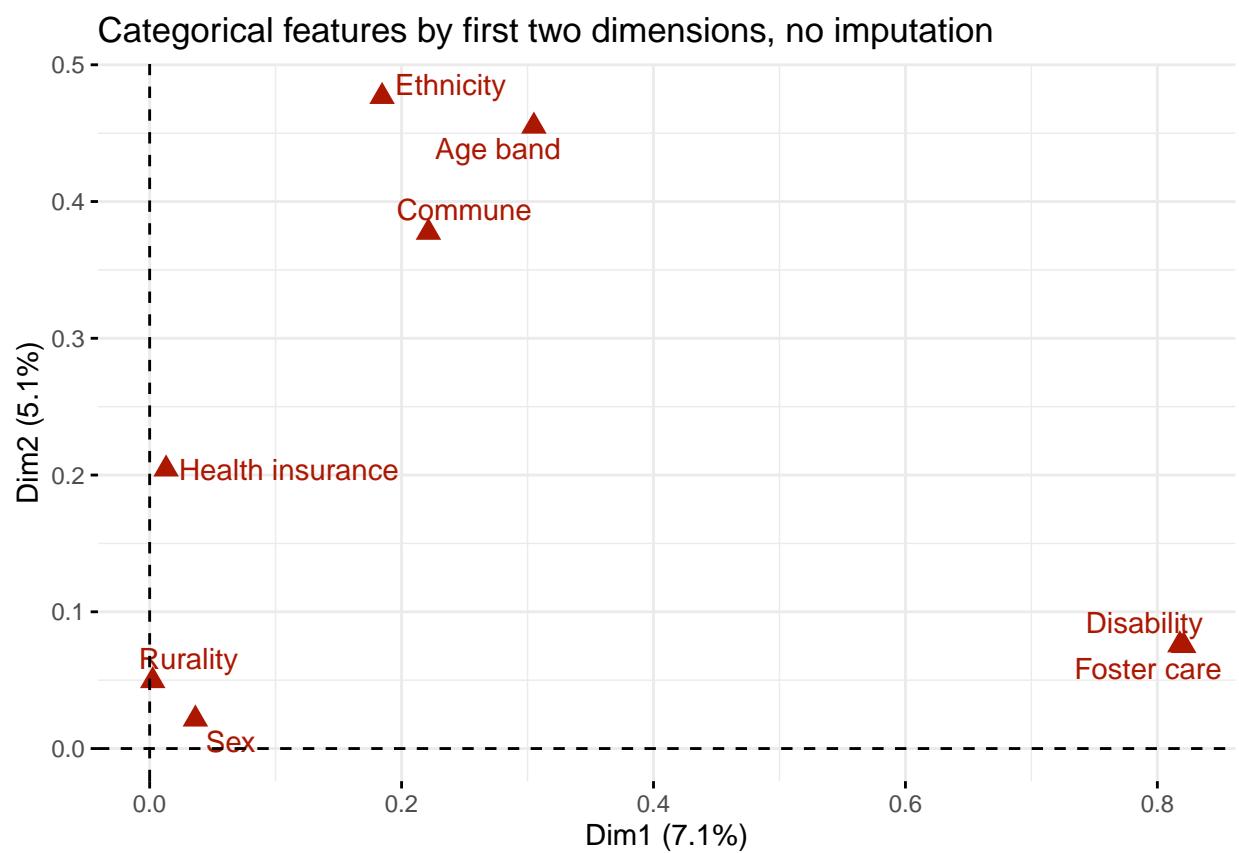


Figure 15: Categorical features by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation.

Categories by first two dimensions, no imputation

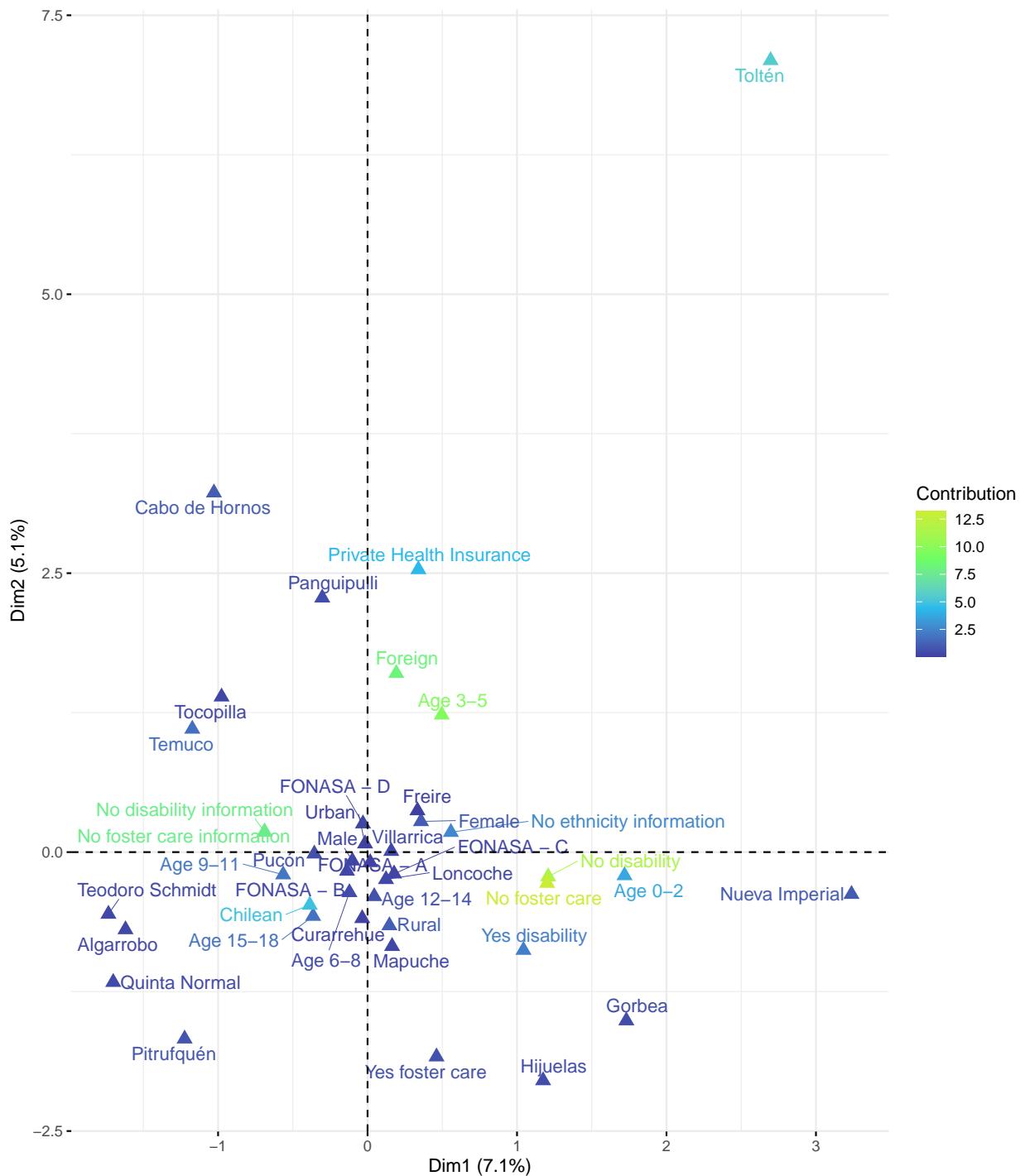


Figure 16: Available categories by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation.

Contribution of categories to first two dimensions, no imputation

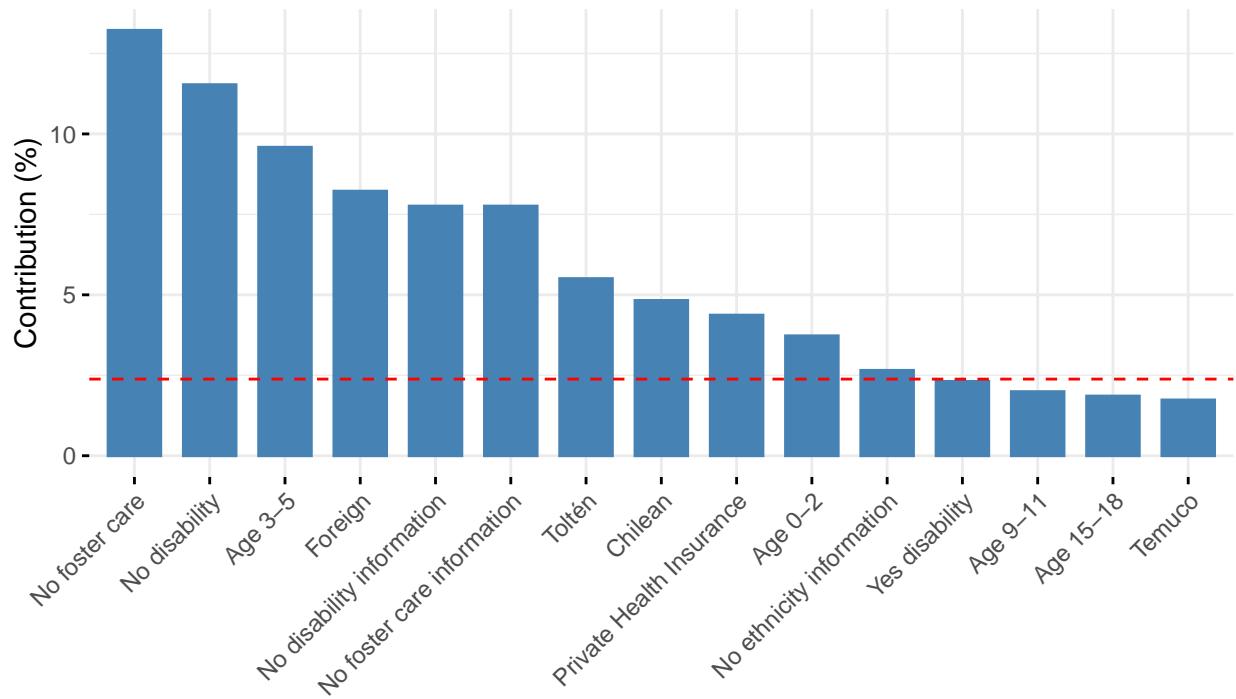


Figure 17: Contribution of the top 15 categories to the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation. The red line shows the expected average if contributions were uniform.

Patients by age band, no imputation

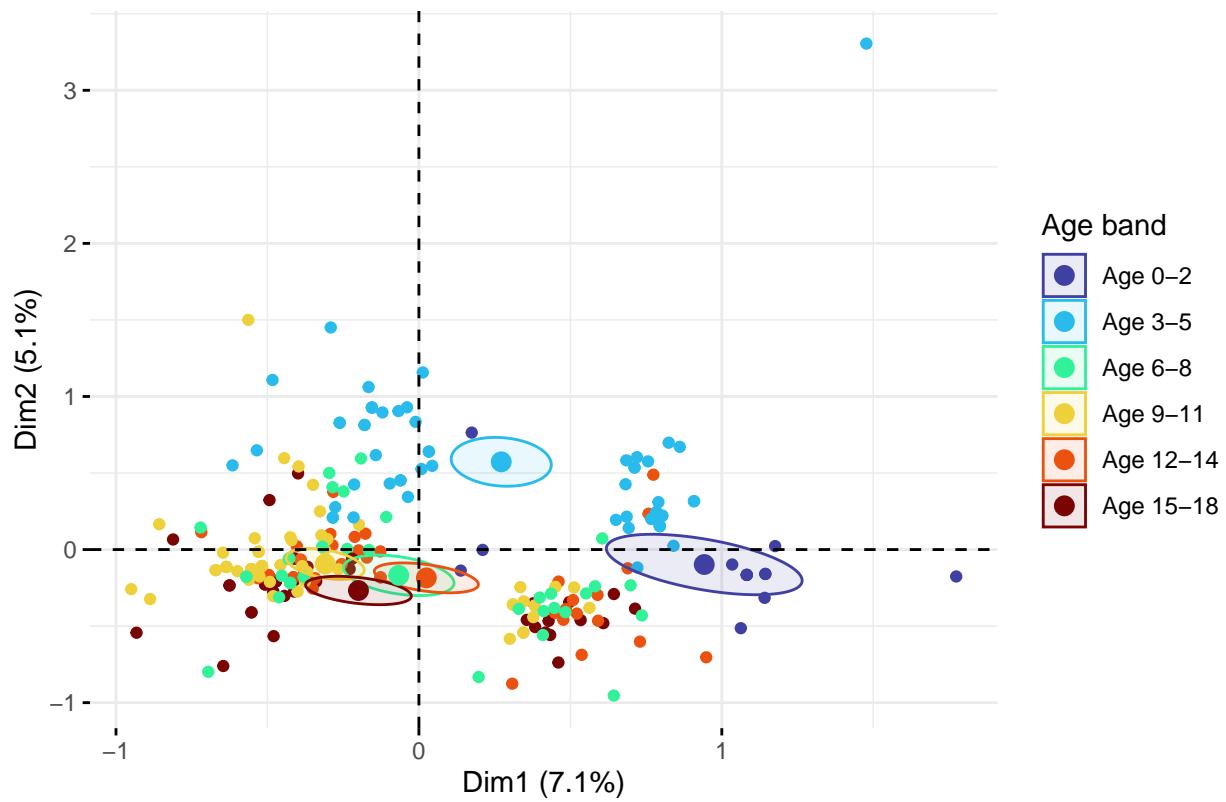


Figure 18: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation, coloured by age band.

Patients by commune of residence, no imputation

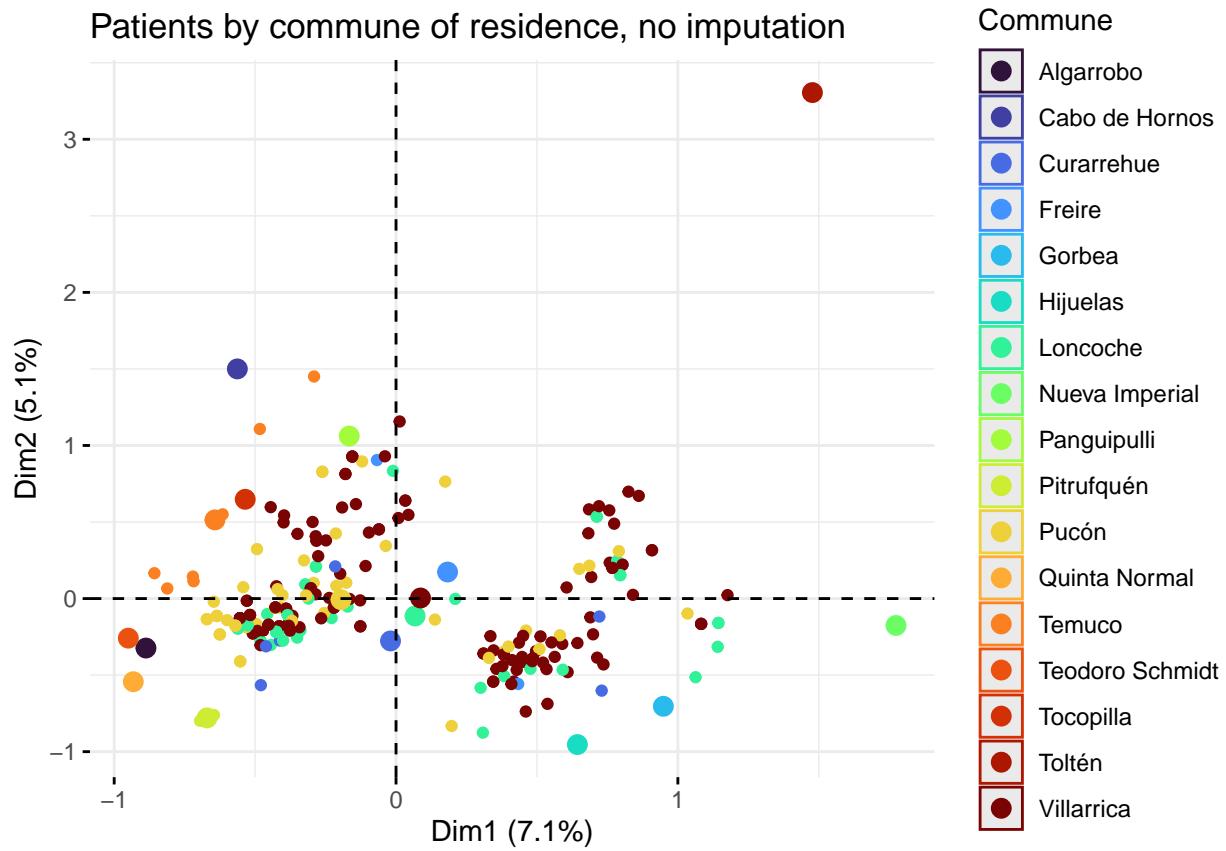


Figure 19: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation, coloured by commune of residence.

Patients by ethnicity, no imputation

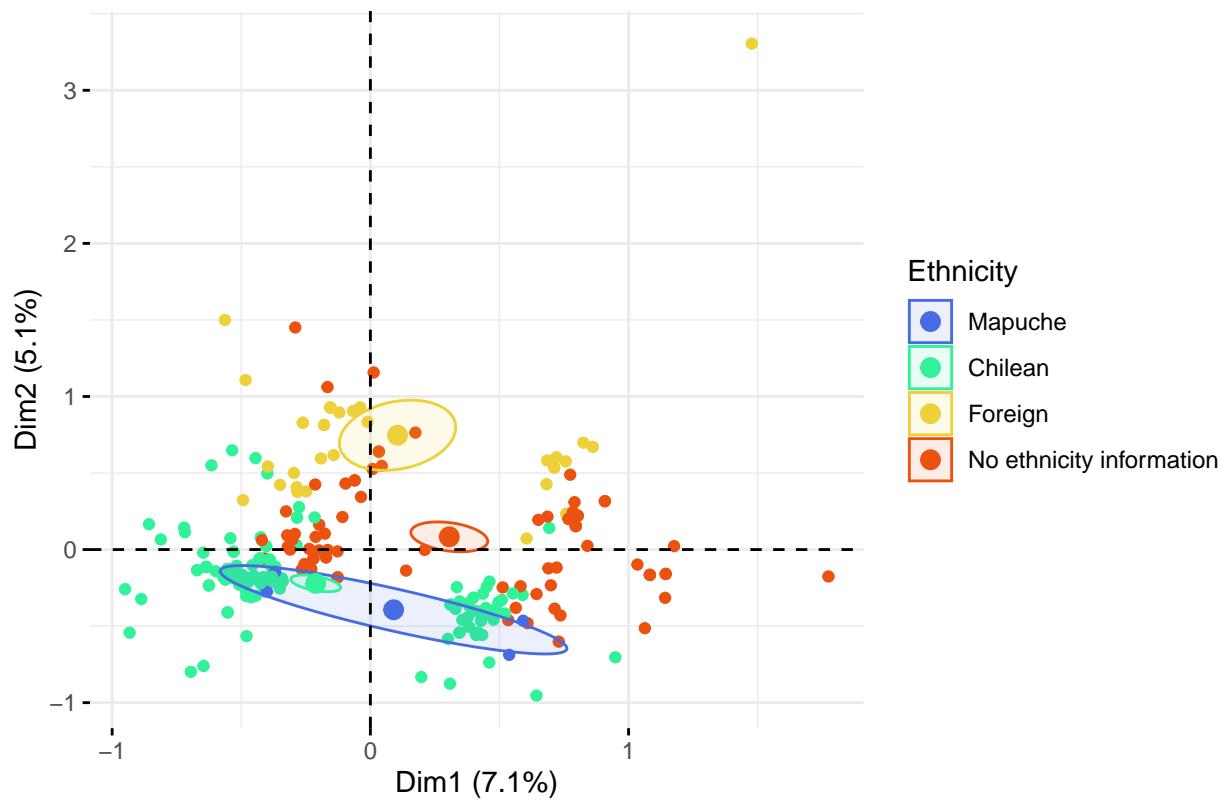


Figure 20: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation, coloured by ethnicity.

Patients by SES status, no imputation

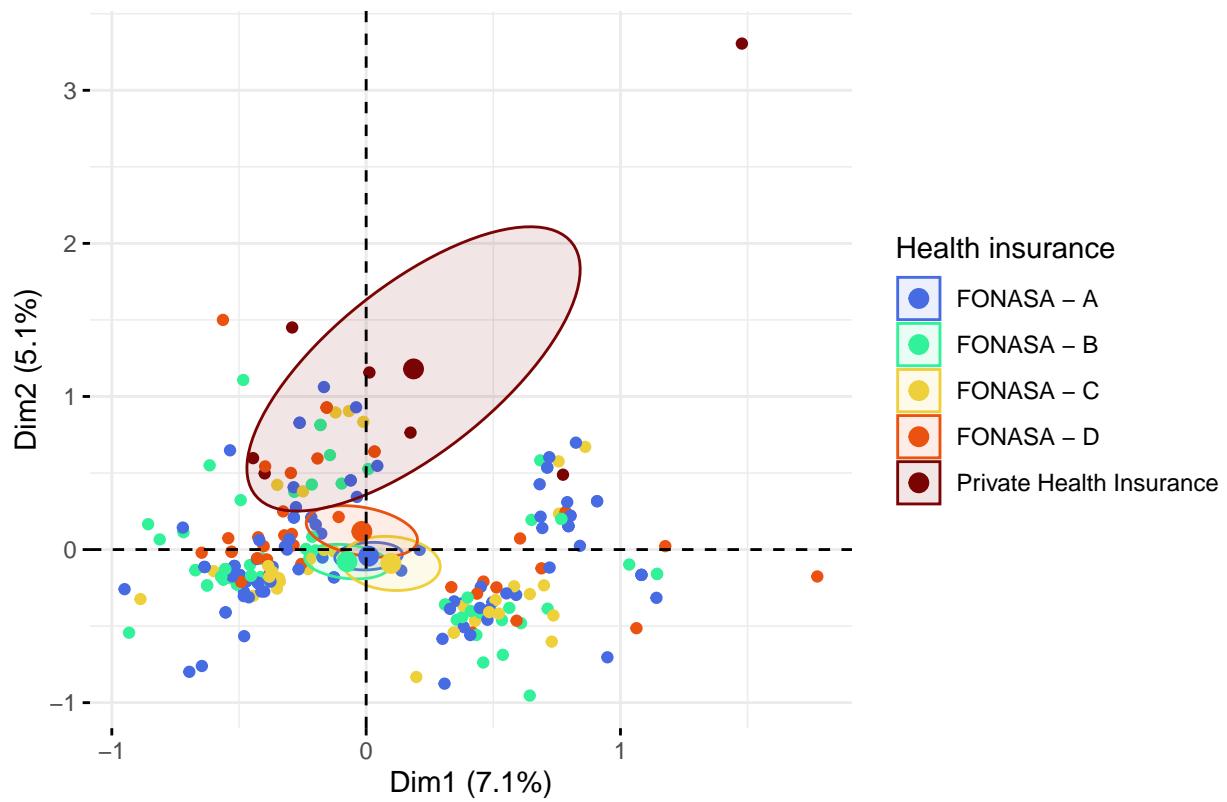
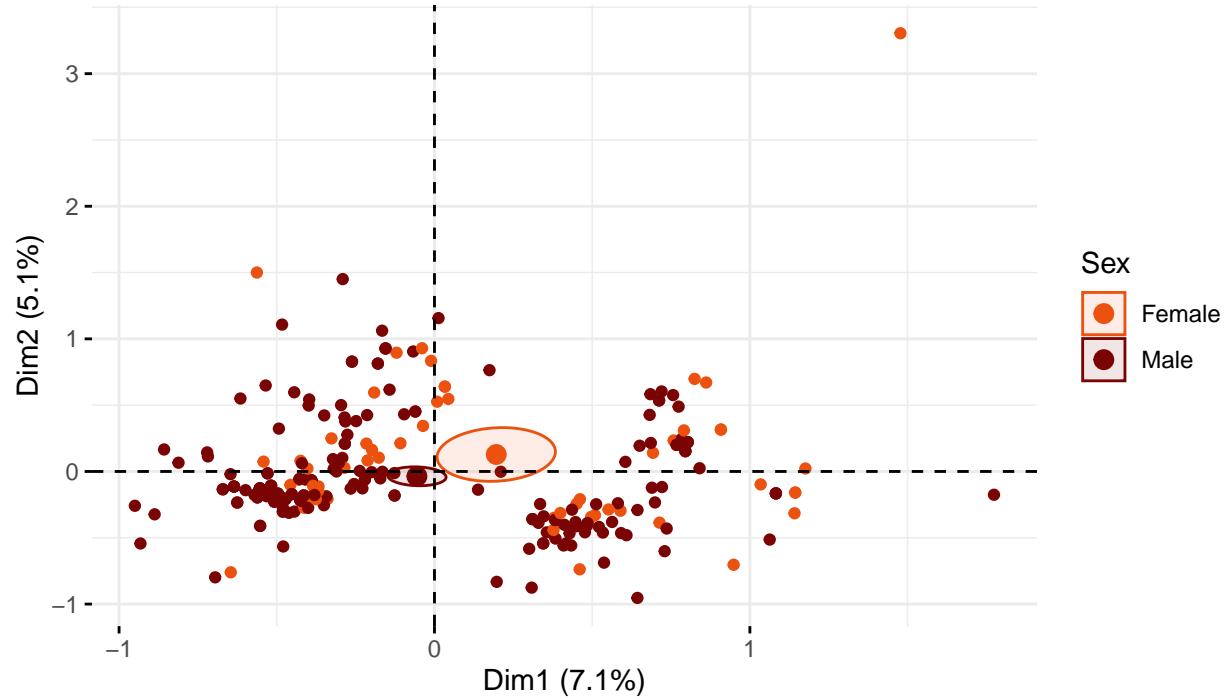


Figure 21: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation, coloured by health insurance level.

Patients by sex, no imputation



Patients by rurality, no imputation

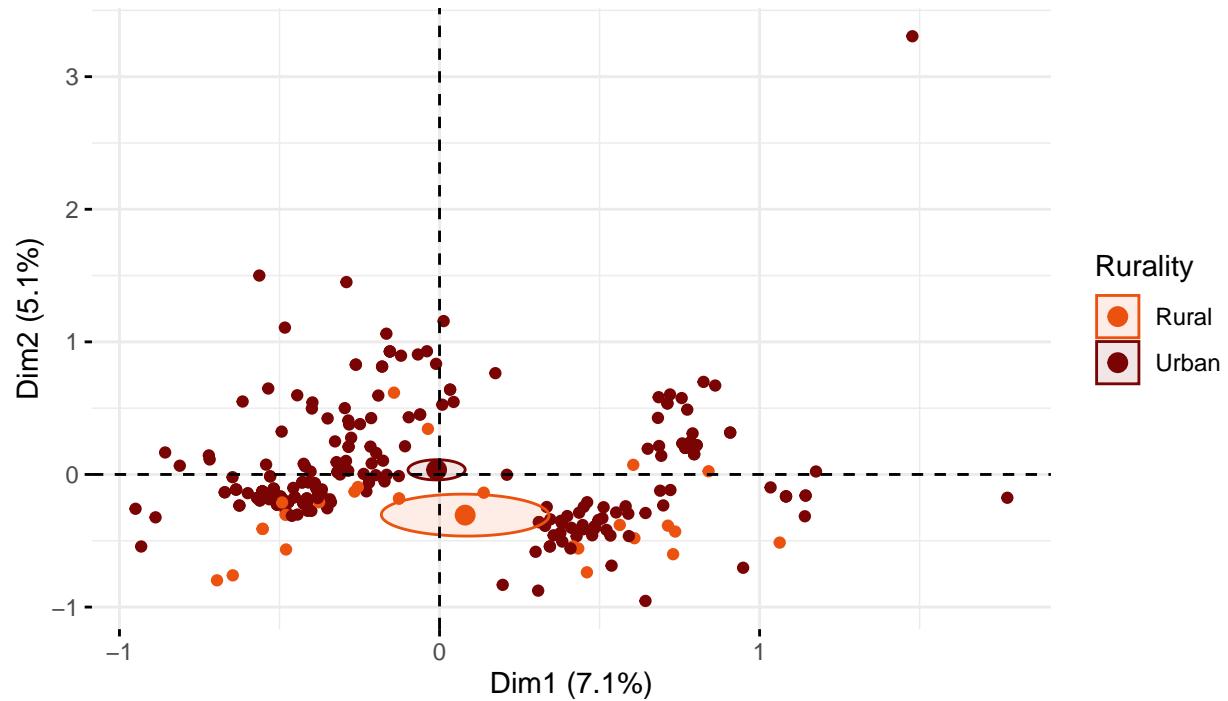
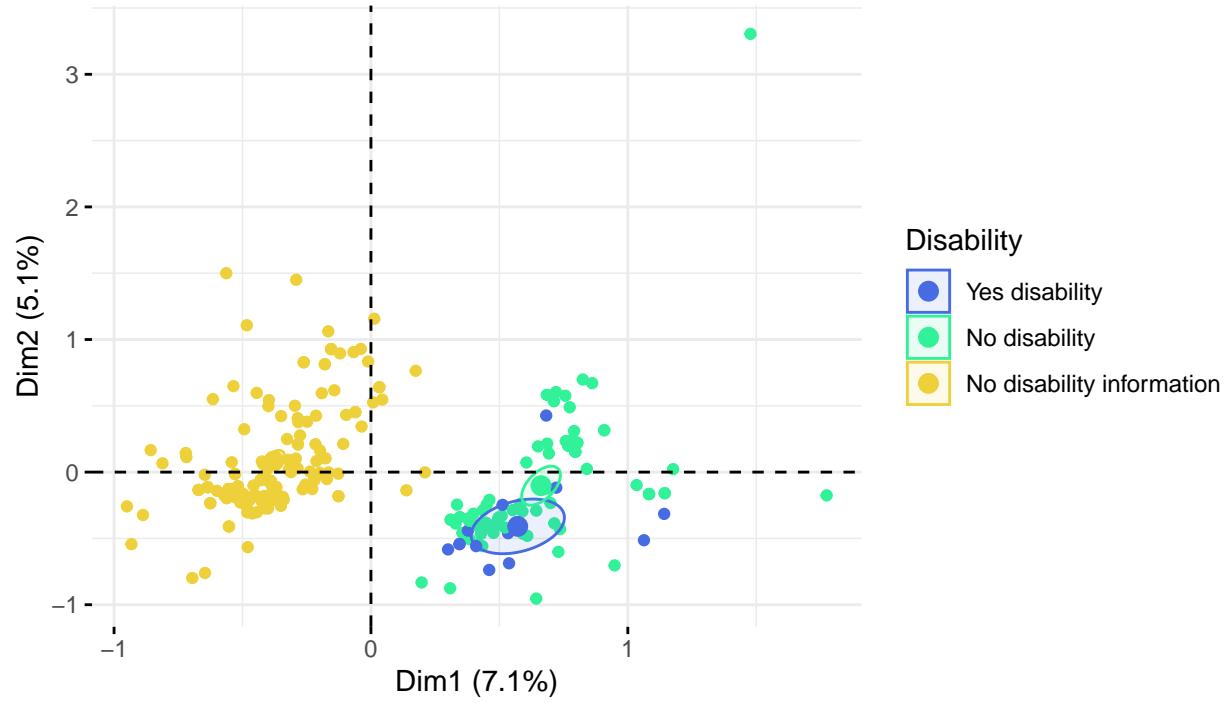


Figure 22: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation, coloured by sex and by rurality of residence.

Patients by disability status, no imputation



Patients by foster care status, no imputation

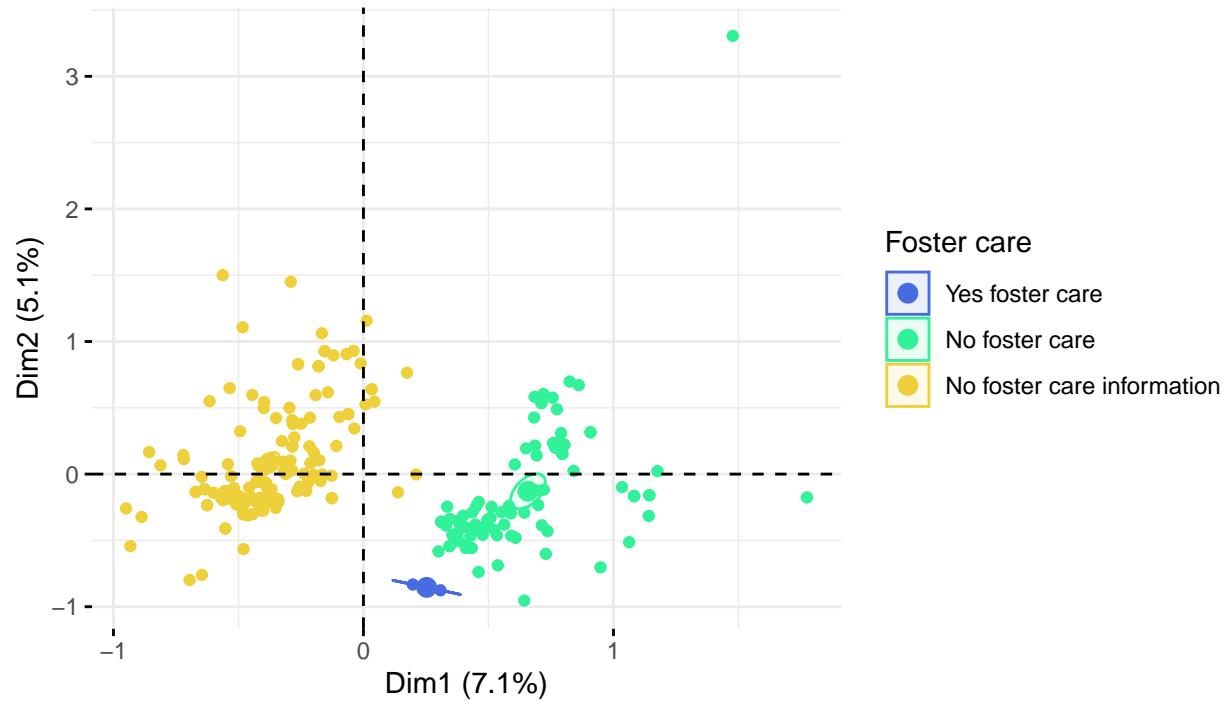


Figure 23: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features without imputation, coloured by disability status and by foster care status.

Categorical features by first two dimensions, with imputation

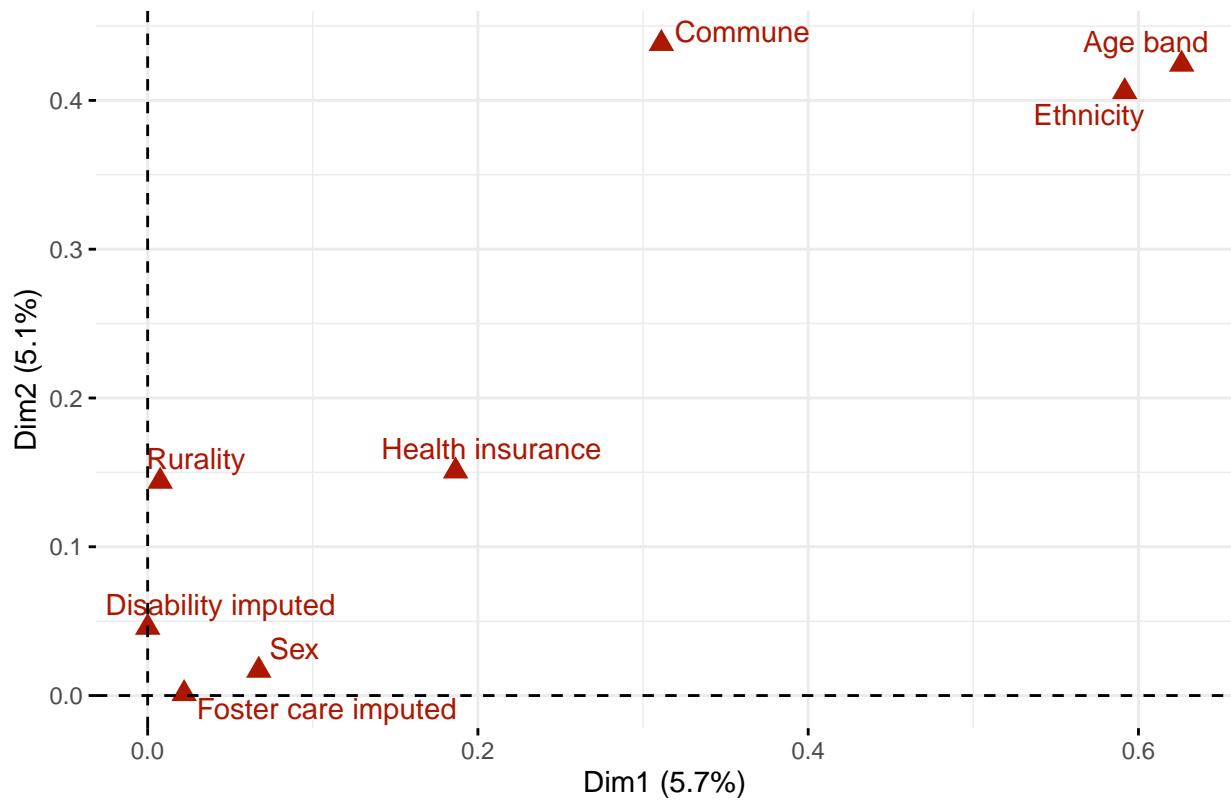


Figure 24: Categorical features by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation.

Categories by first two dimensions, with imputation

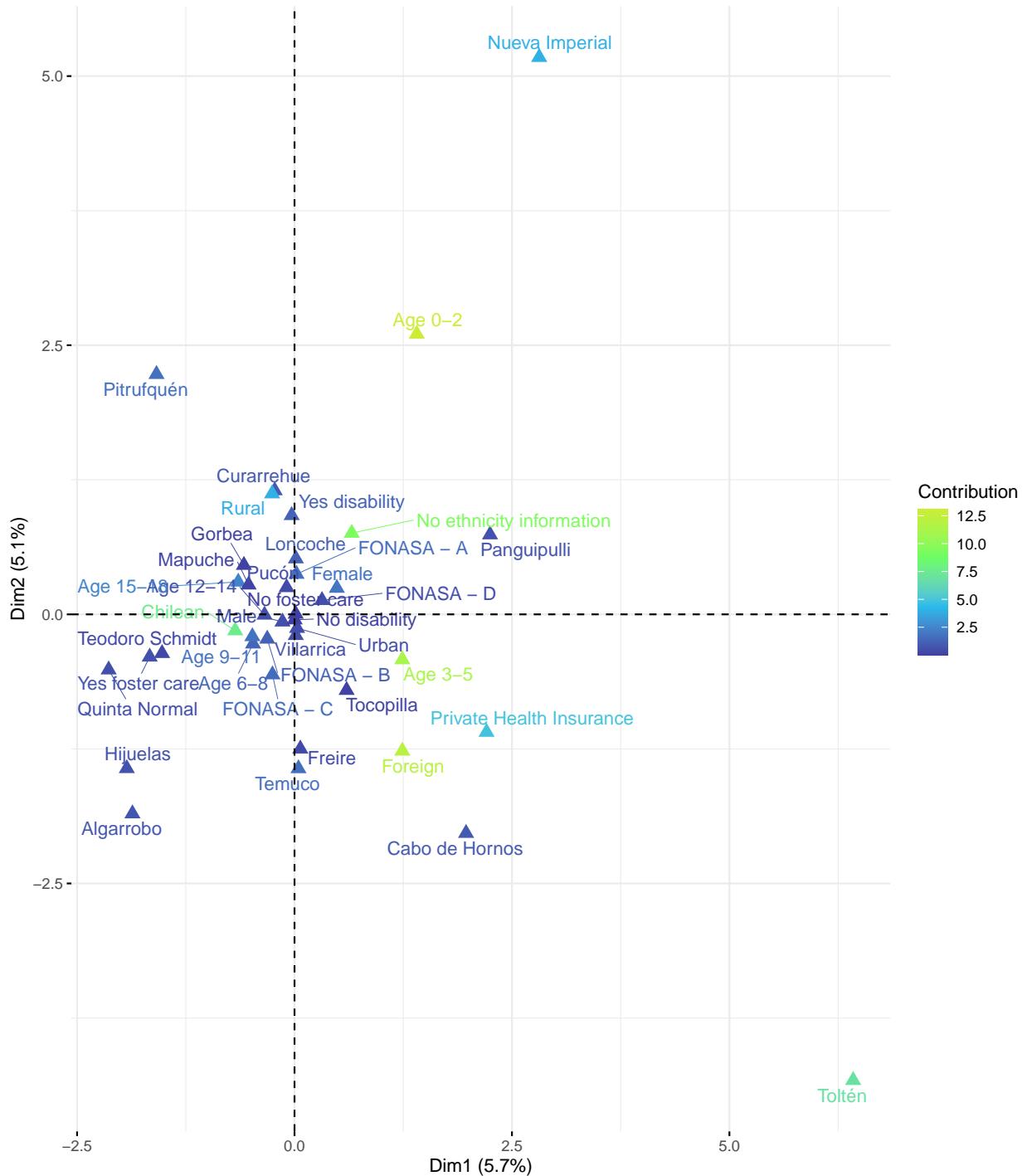


Figure 25: Available categories by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation.

Contribution of categories to first two dimensions, with imputation

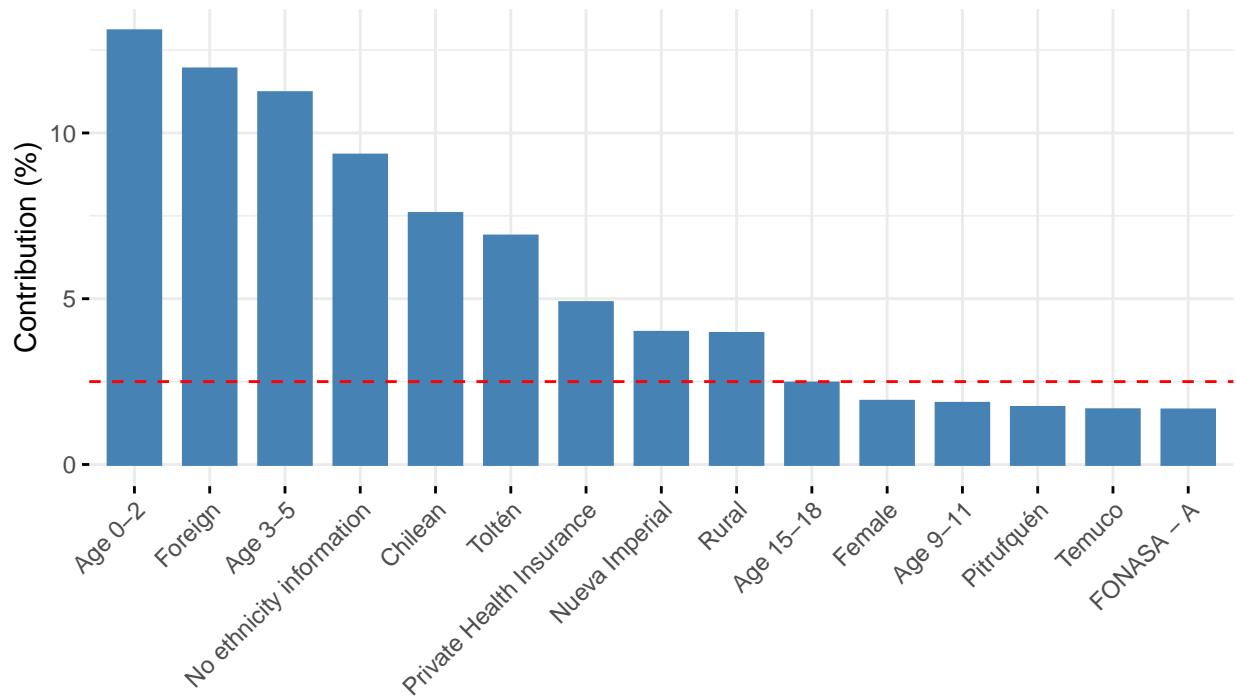


Figure 26: Contribution of the top 15 categories to the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation. The red line shows the expected average if contributions were uniform.

Patients by age band, with imputation

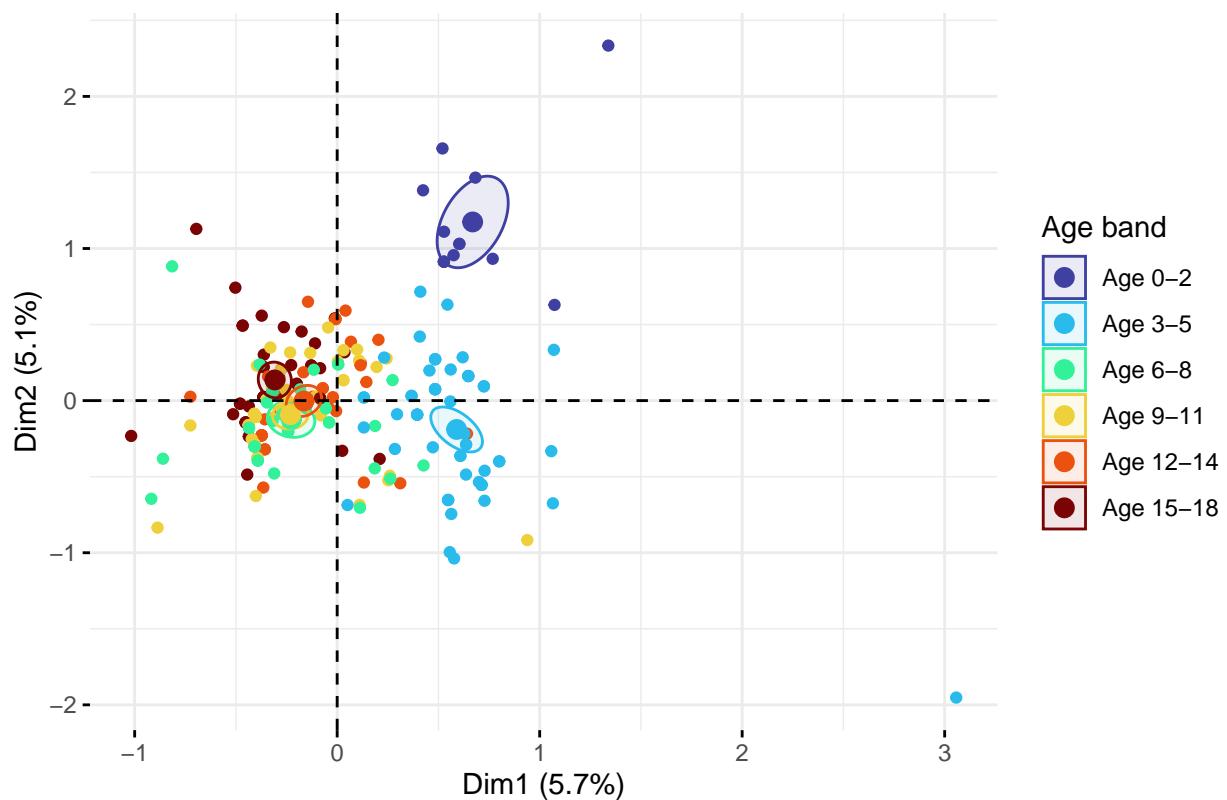


Figure 27: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation, coloured by age band.

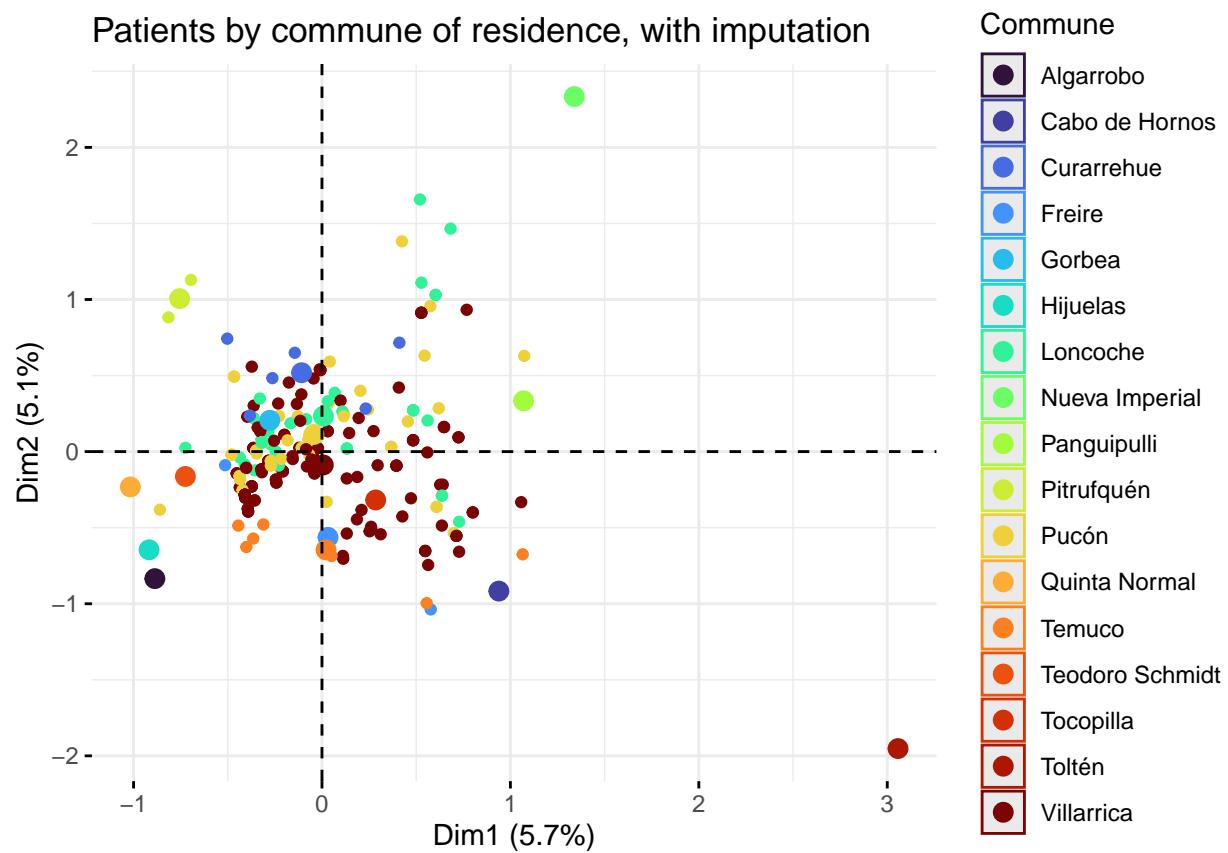


Figure 28: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation, coloured by commune of residence.

Patients by ethnicity, with imputation

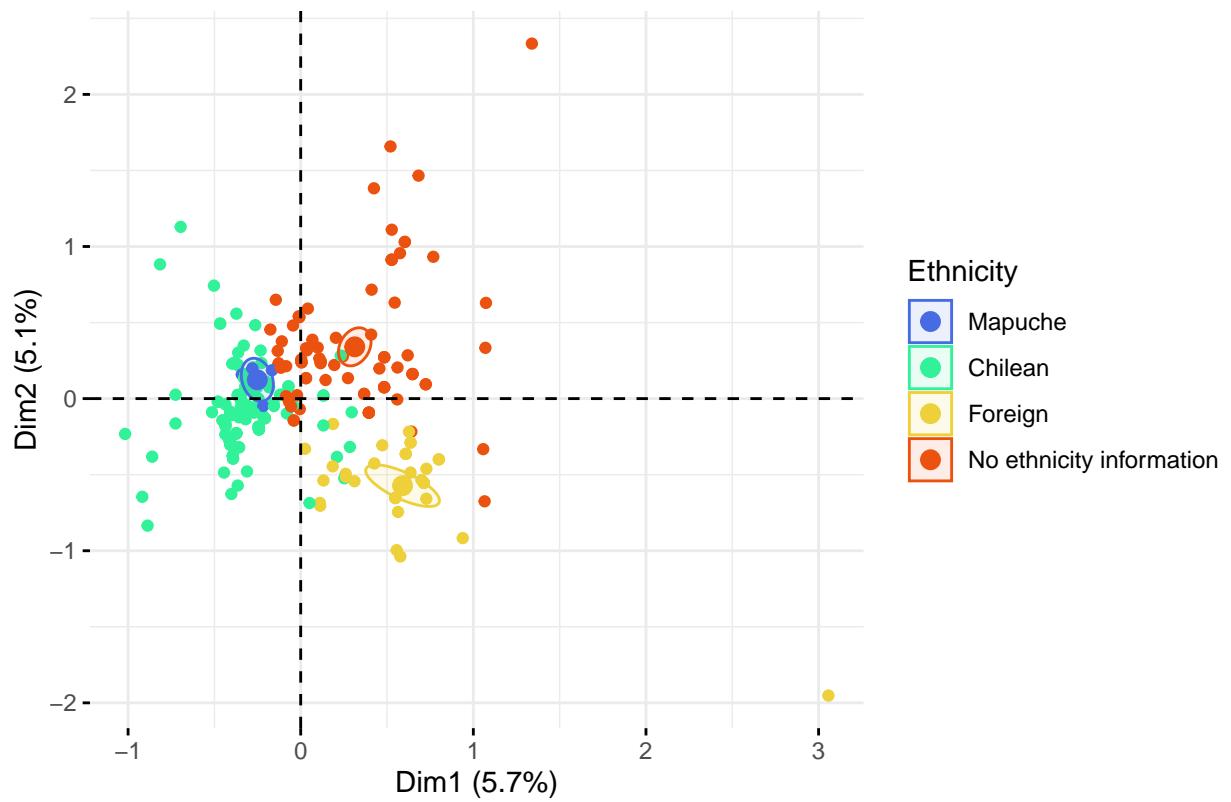


Figure 29: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation, coloured by ethnicity.

Patients by SES status, with imputation

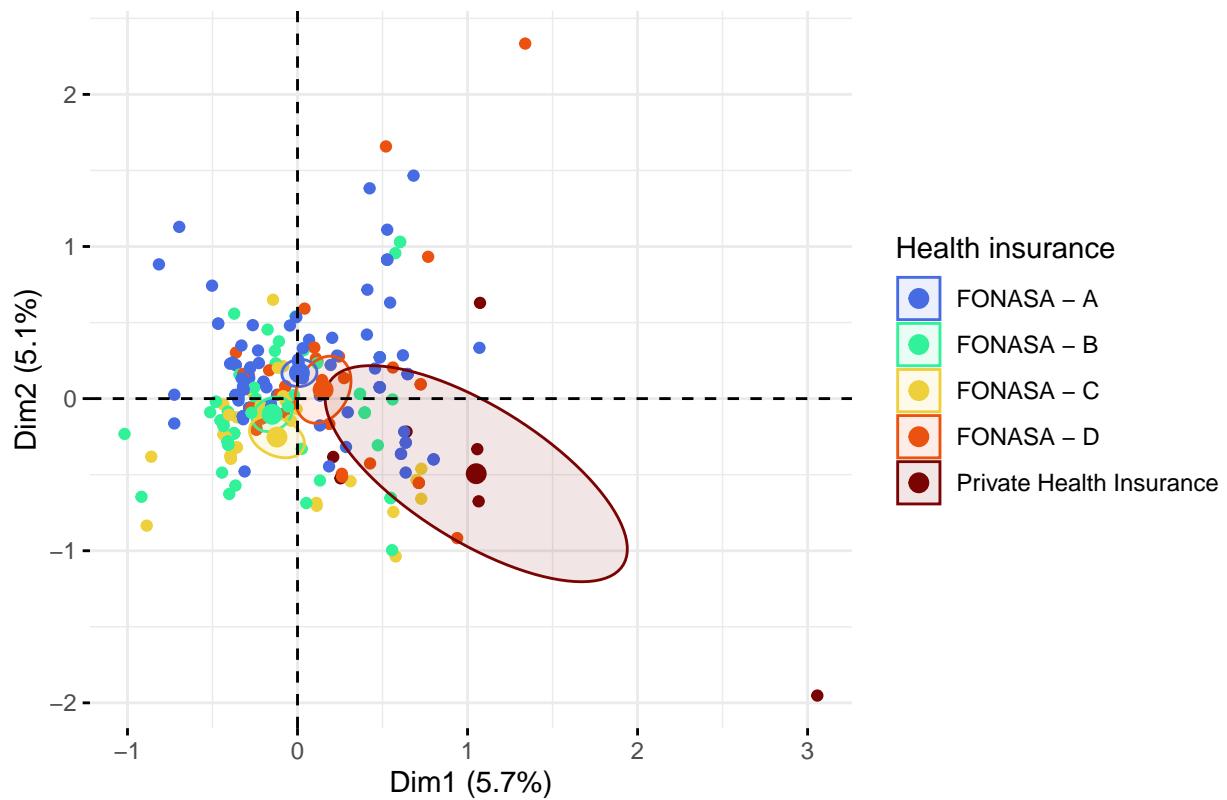
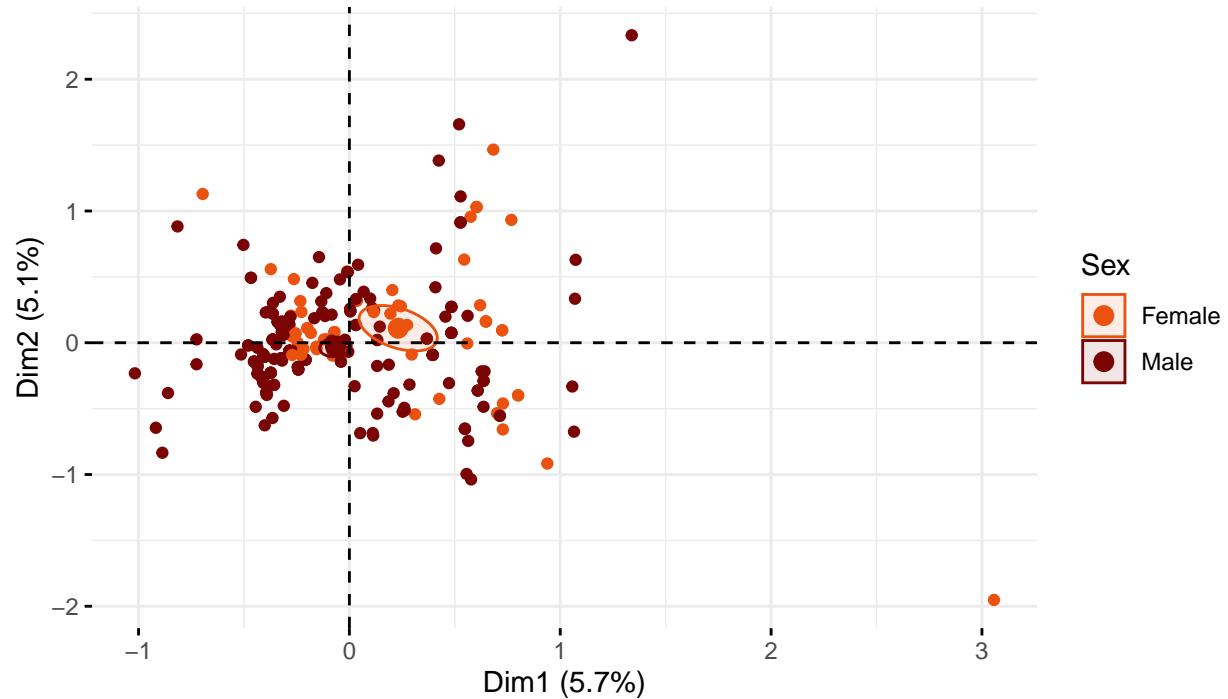


Figure 30: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation, coloured by health insurance level.

Patients by sex, with imputation



Patients by rurality, with imputation

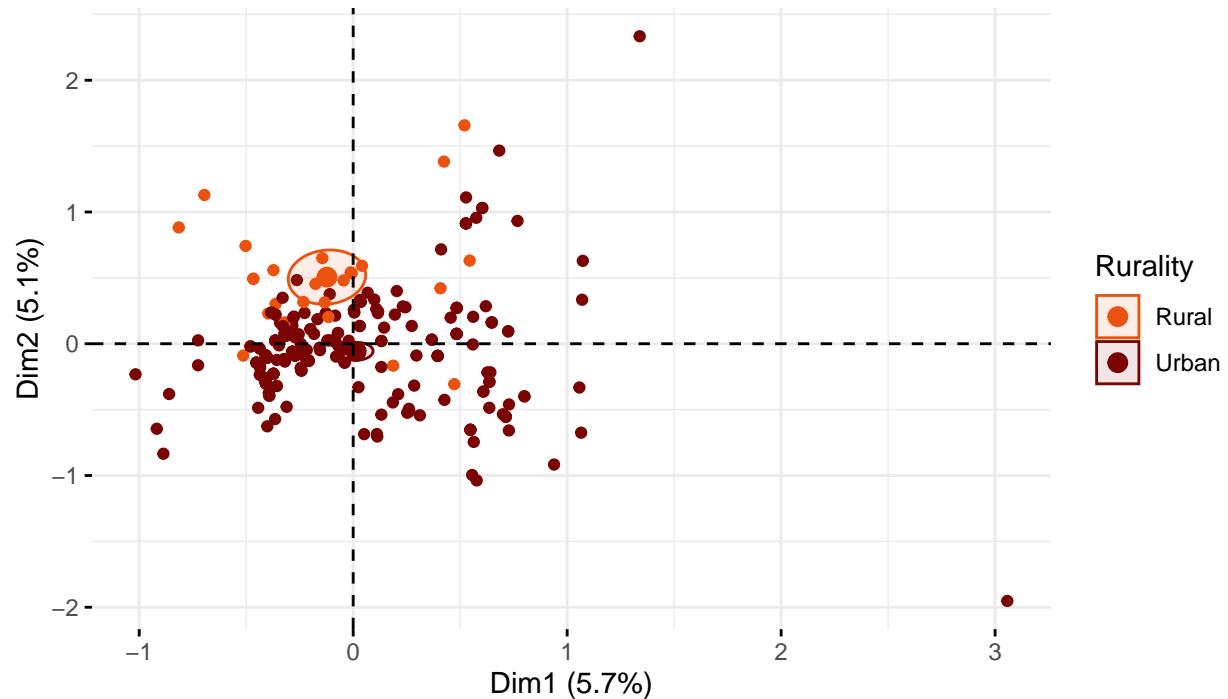
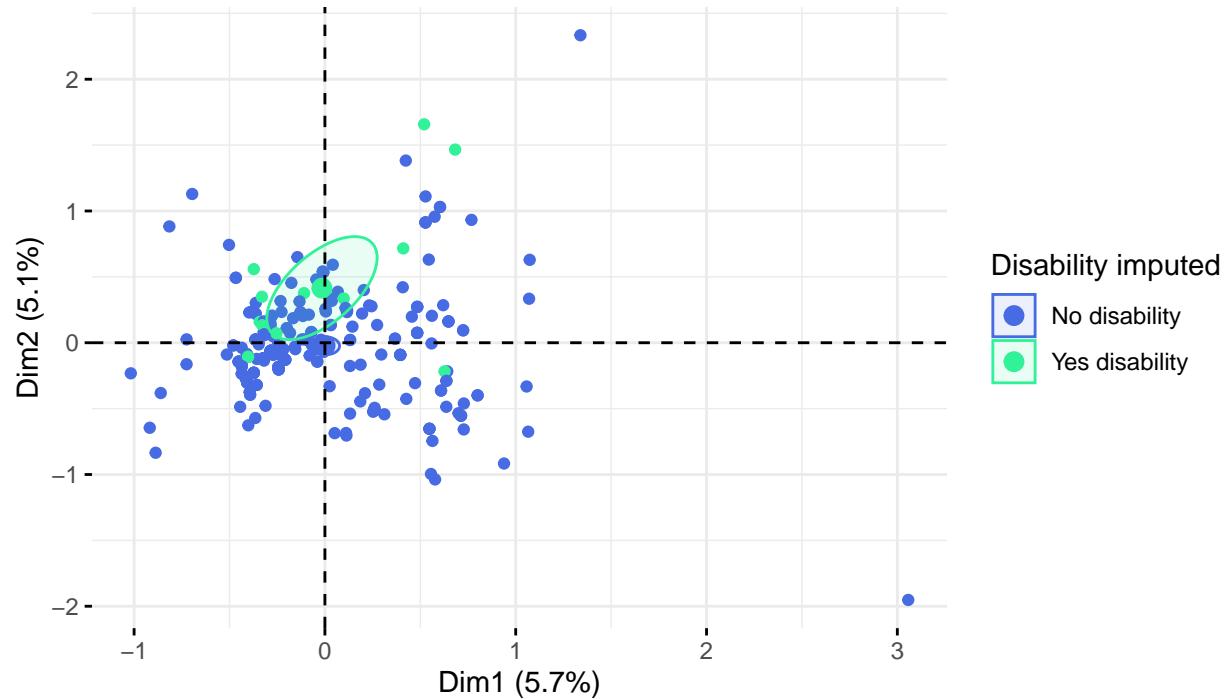


Figure 31: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation, coloured by sex and by rurality of residence.

Patients by disability status, with imputation



Patients by foster care status, with imputation

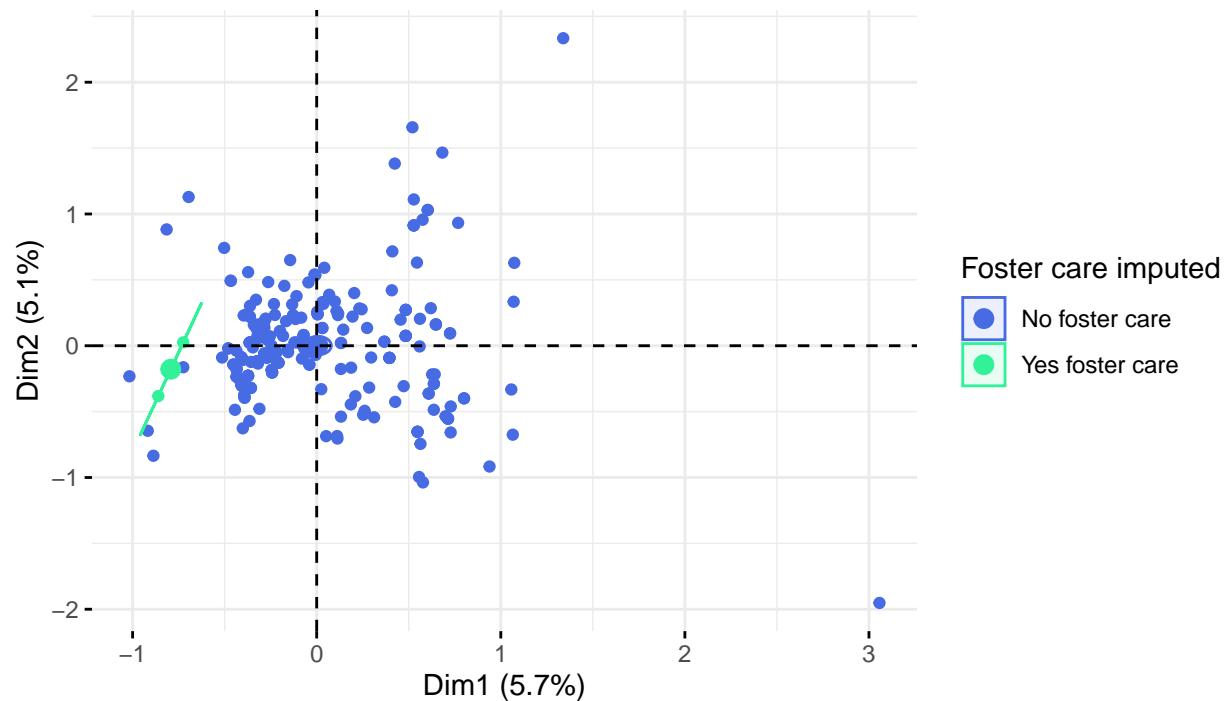


Figure 32: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using all features with imputation, coloured by disability status and by foster care status.

Categorical features by first two dimensions for age band, commune and ethnicity

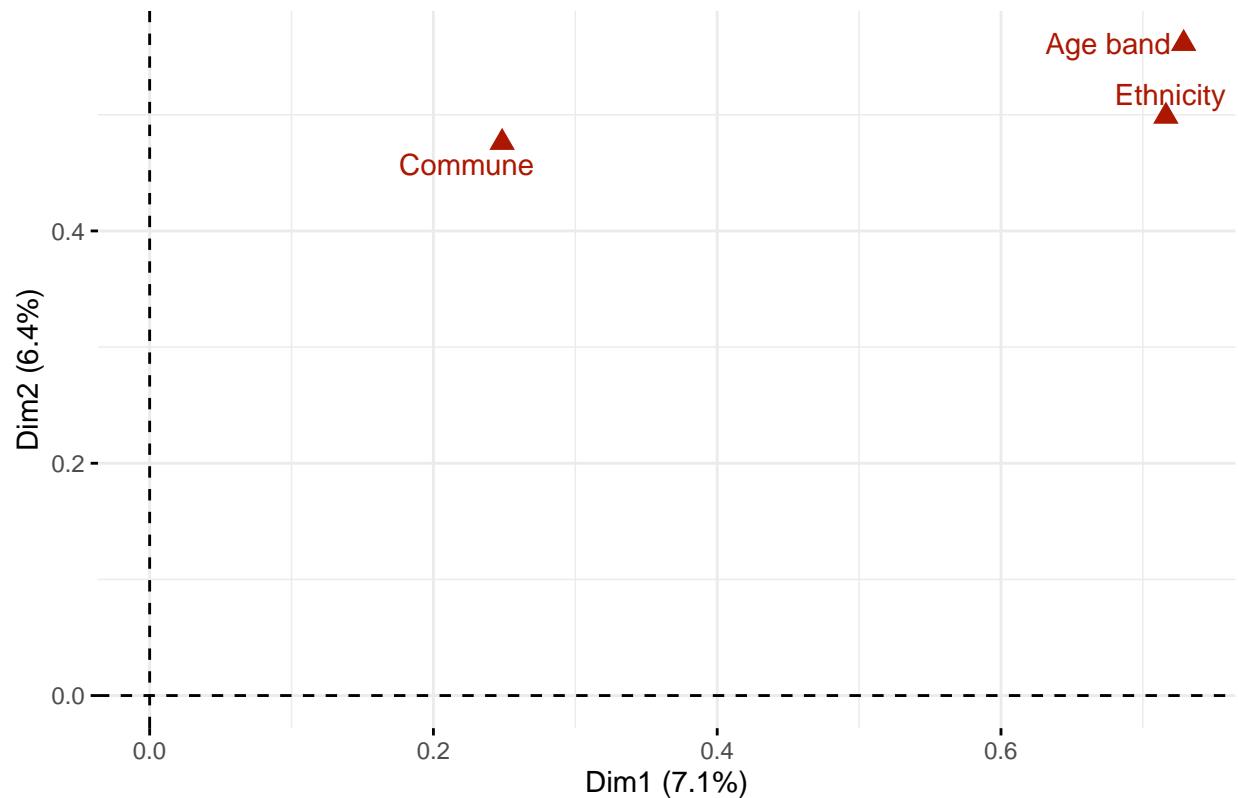


Figure 33: Categorical features by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using patients' age band, commune of residence and ethnicity.

Categories by first two dimensions for age band, commune and ethnicity

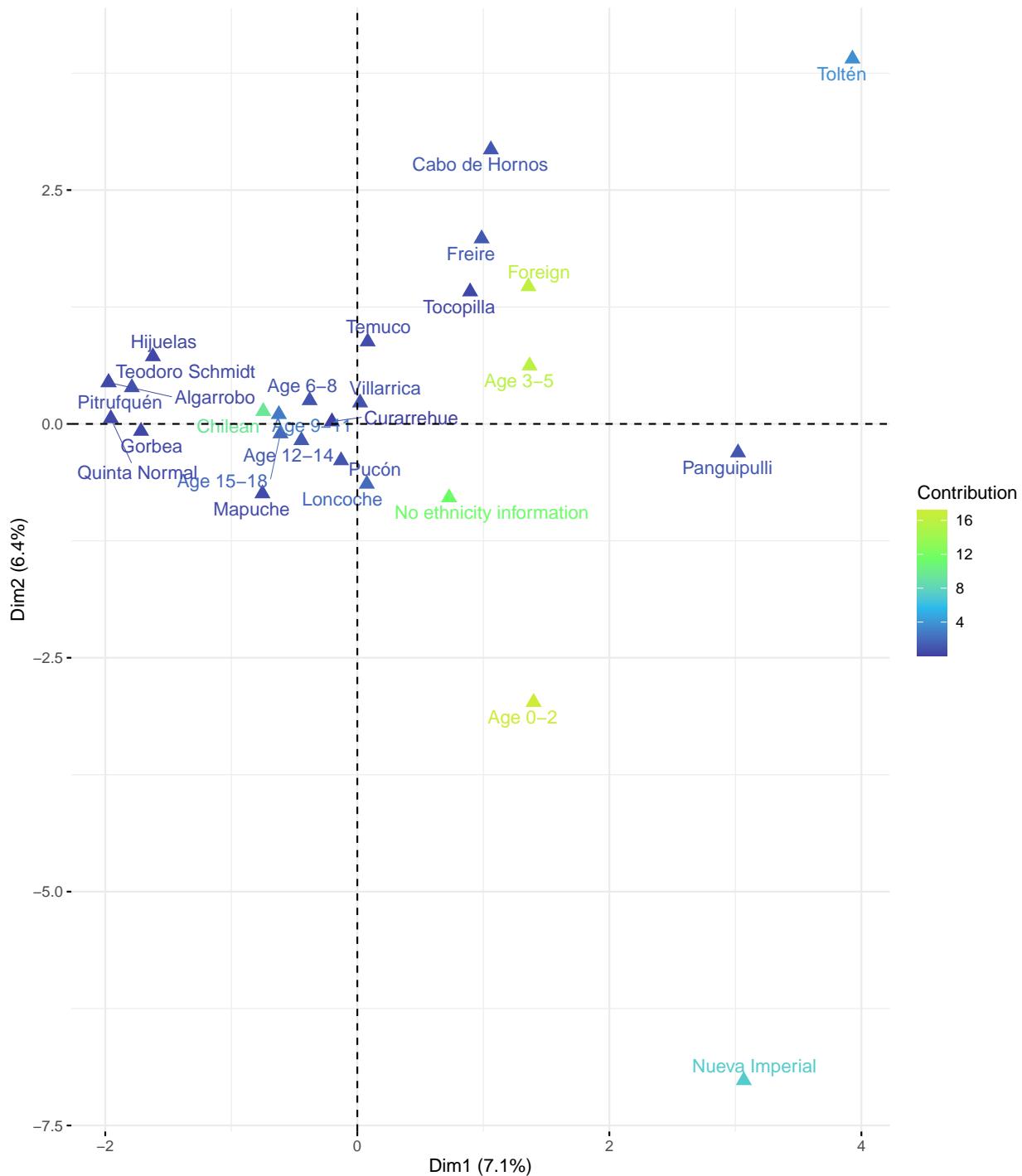


Figure 34: Available categories by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using patients' age band, commune and ethnicity.

Contribution of categories to first two dimensions for age band, commune ar

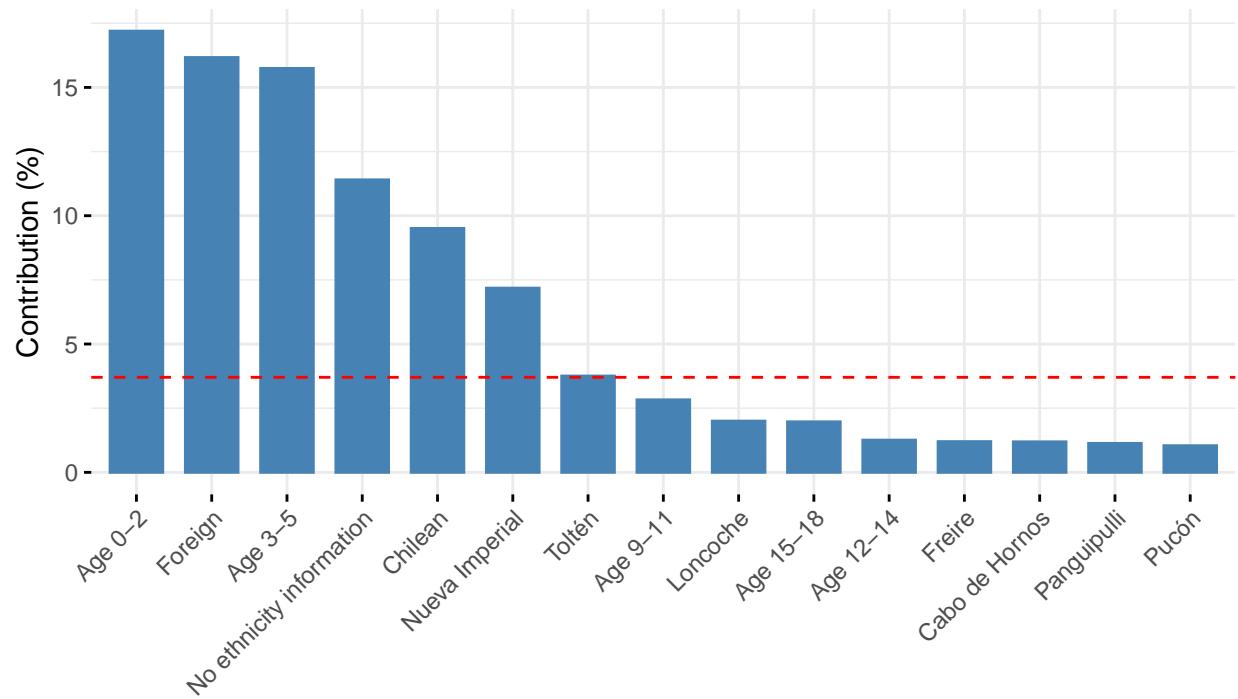


Figure 35: Contribution of the top 15 categories to the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using patients' age band, commune and ethnicity. The red line shows the expected average if contributions were uniform.

Patients by age band for age band, commune and ethnicity

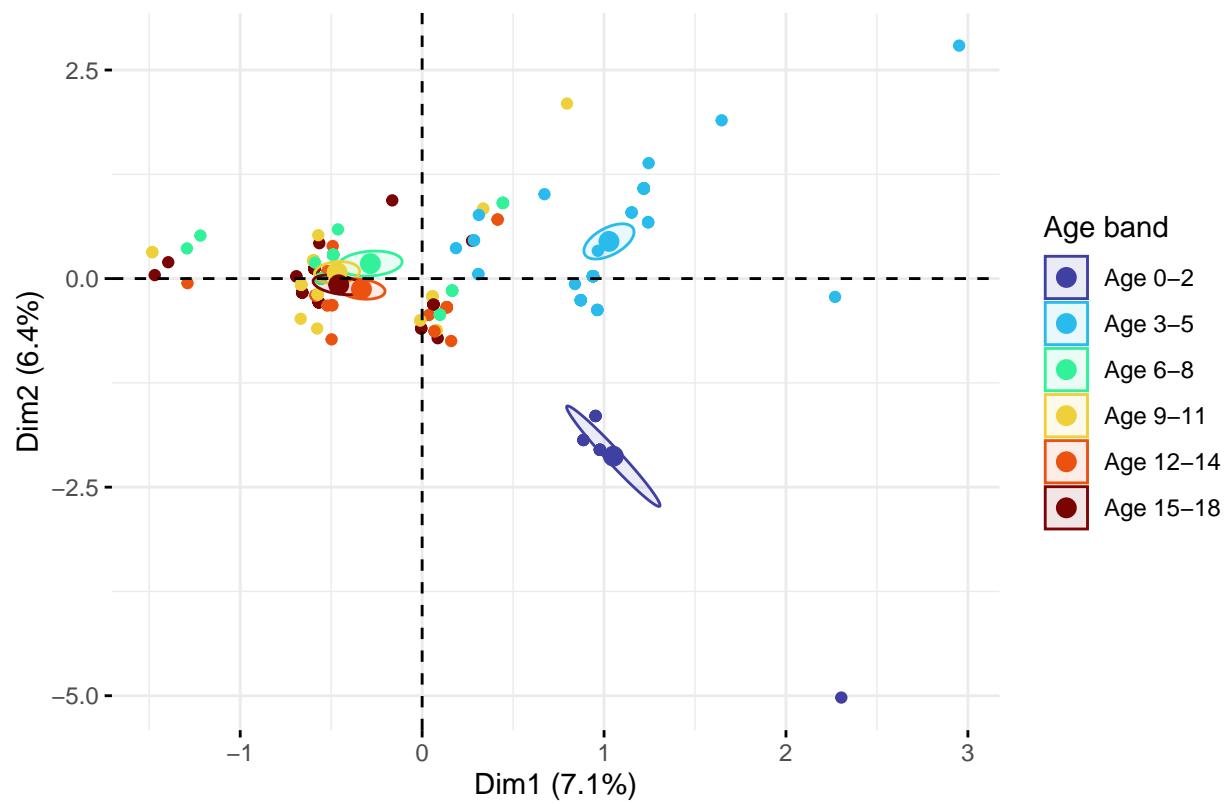


Figure 36: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using patients' age band, commune and ethnicity, coloured by age band.

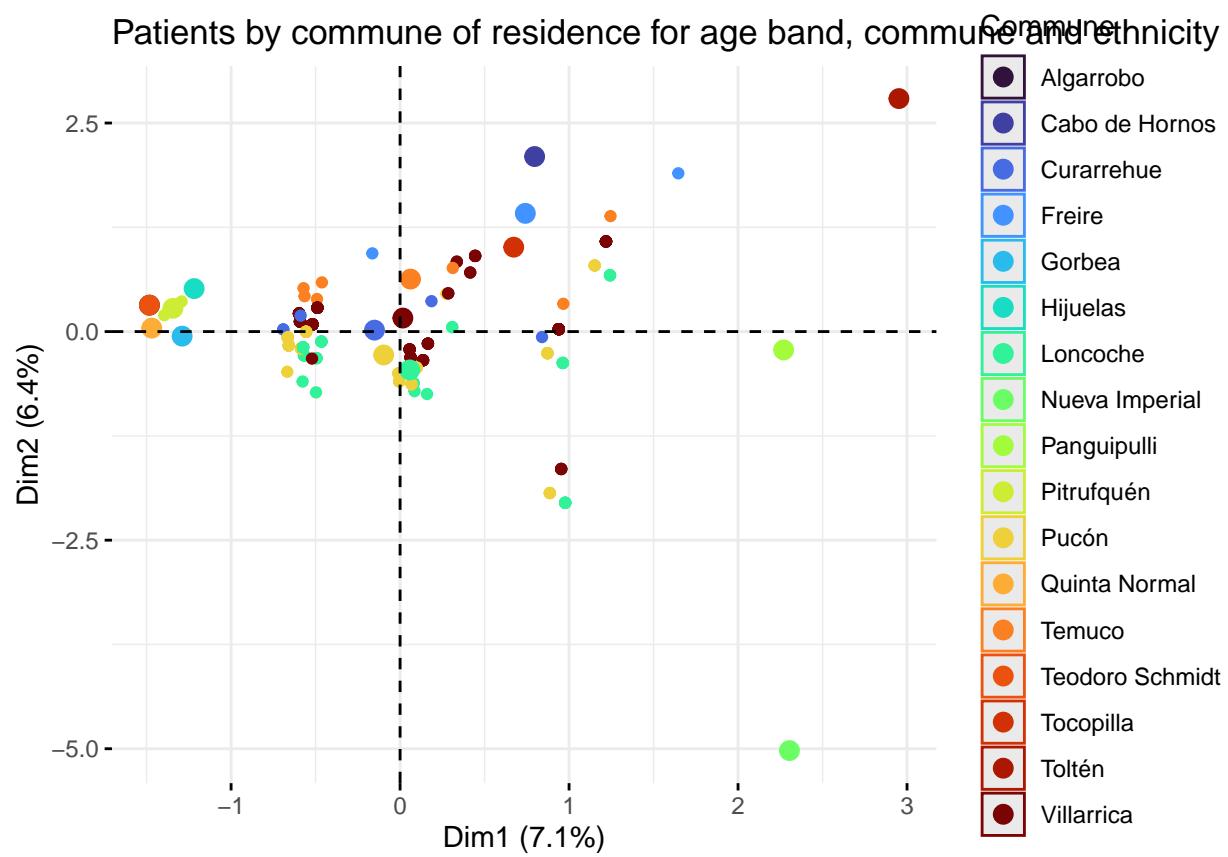


Figure 37: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using age band, commune and ethnicity, coloured by commune of residence.

Patients by ethnicity, with imputation for age band, commune and ethnicity

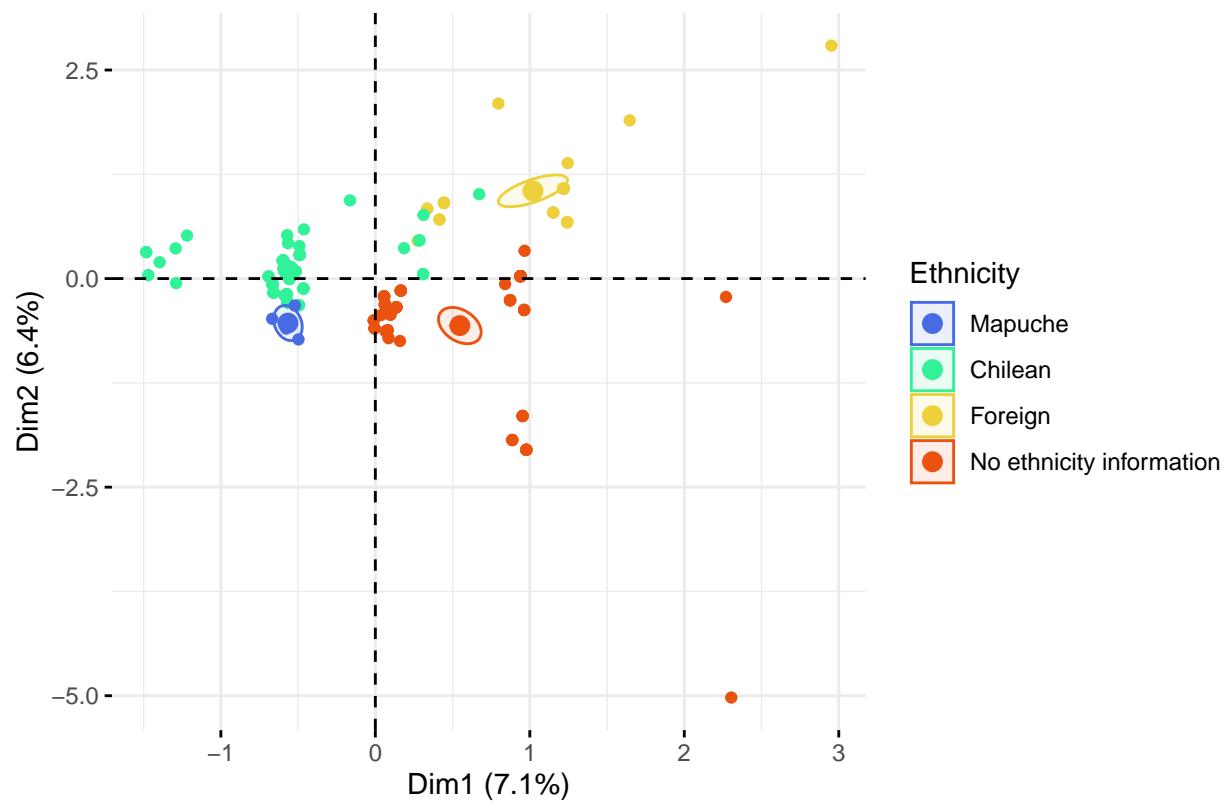
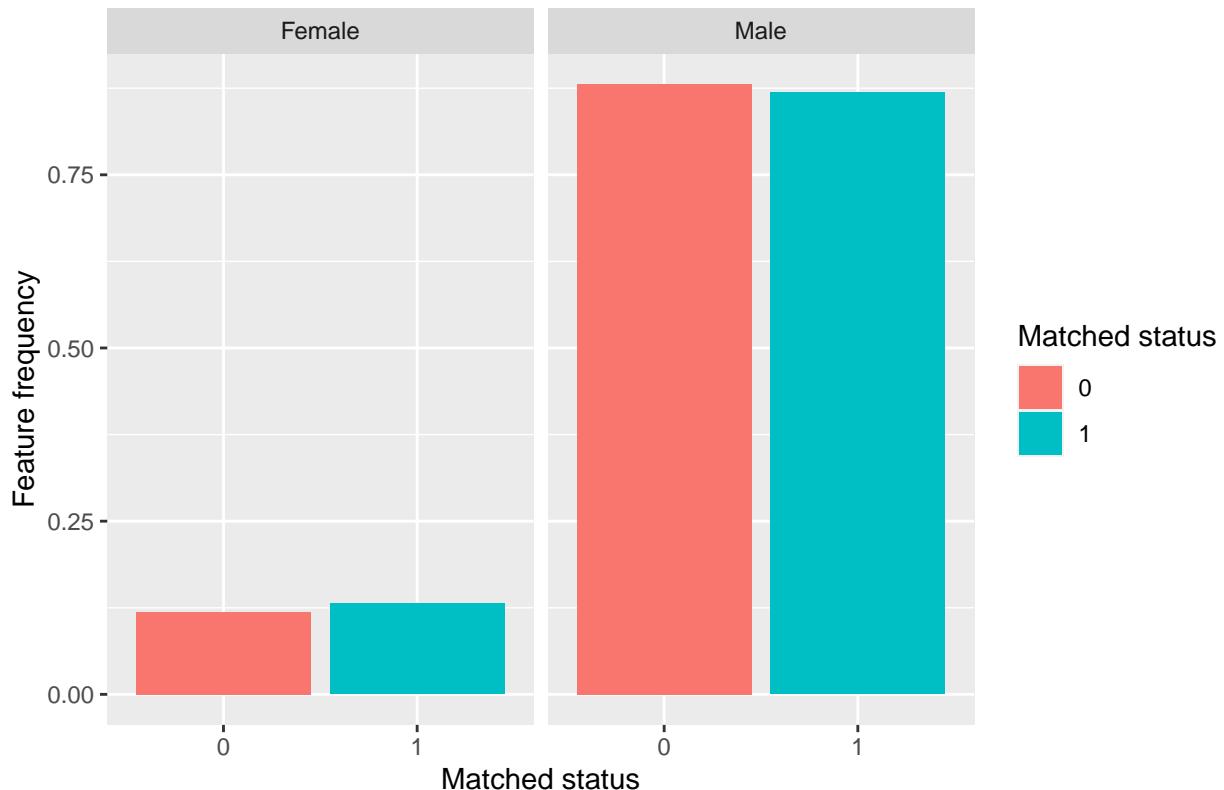


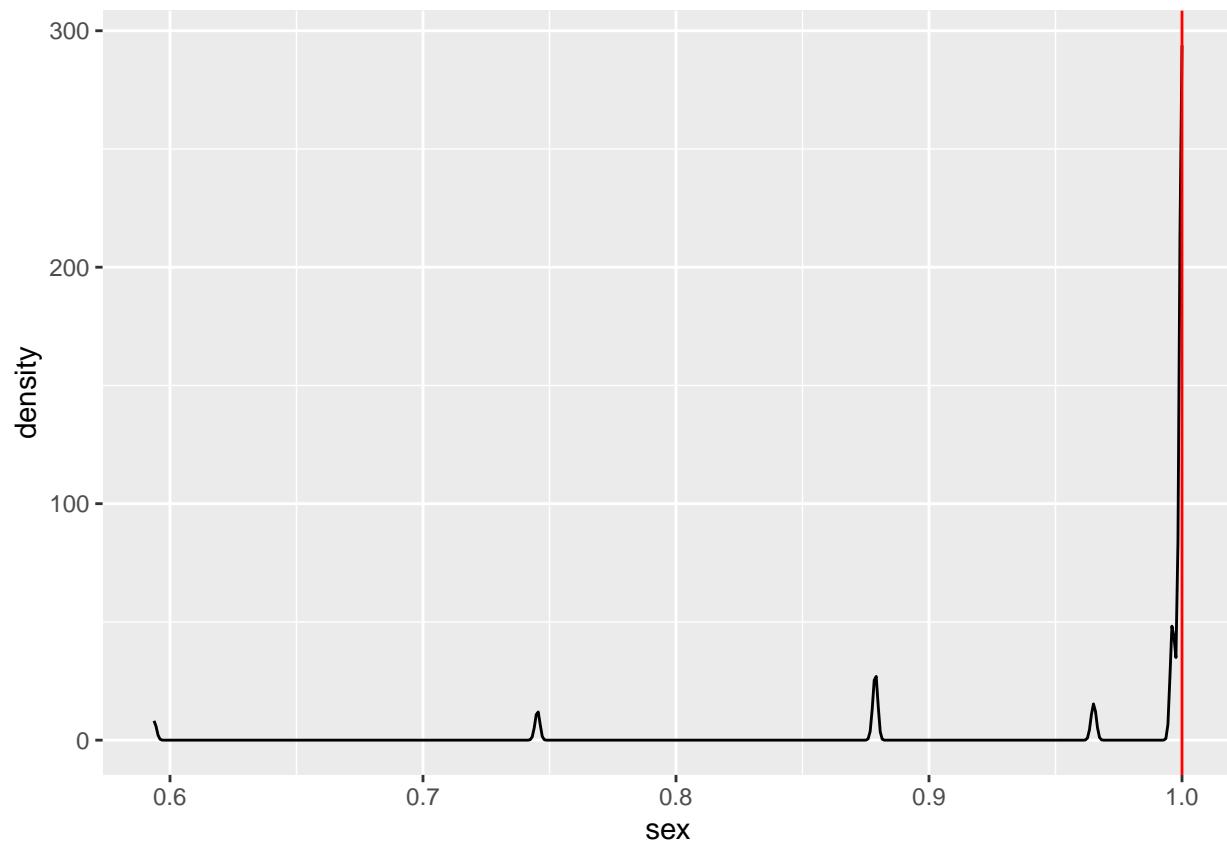
Figure 38: Patients by the first two dimensions of multiple correspondence analysis on autism patients in the small clinical data using age band, commune and ethnicity, coloured by ethnicity.

5.5.2 Differences between un/matched

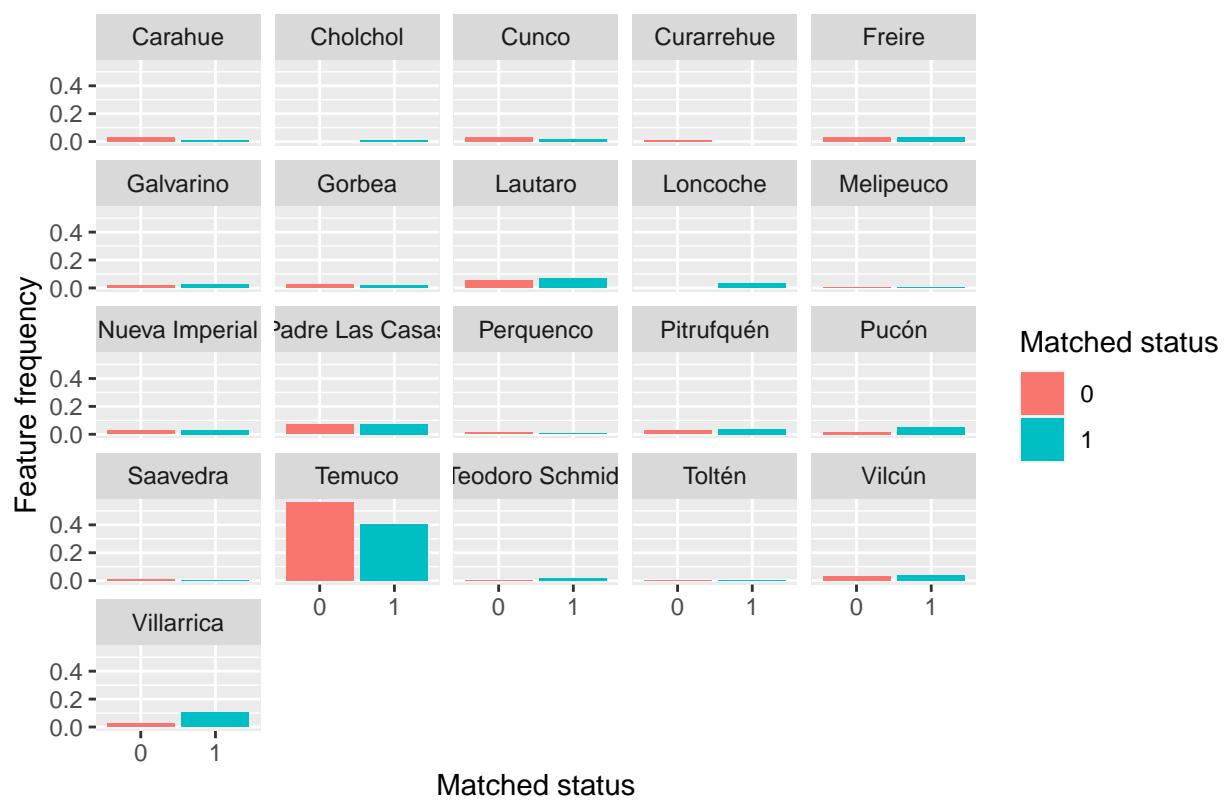
```
##  
## Two-sample Kolmogorov-Smirnov test  
##  
## data: na.omit(school_yes$sex.school) and na.omit(school_no$sex.school)  
## D = 0.012308, p-value = 1  
## alternative hypothesis: two-sided  
  
##  
## Two-sample Kolmogorov-Smirnov test  
##  
## data: as.numeric(na.omit(school_yes$ses_status.school)) and as.numeric(na.omit(school_no$ses_status  
## D = 0.094886, p-value = 0.2286  
## alternative hypothesis: two-sided  
  
##  
## Two-sample Kolmogorov-Smirnov test  
##  
## data: as.numeric(na.omit(school_yes$commune_code)) and as.numeric(na.omit(school_no$commune_code))  
## D = 0.20245, p-value = 9.174e-05  
## alternative hypothesis: two-sided
```

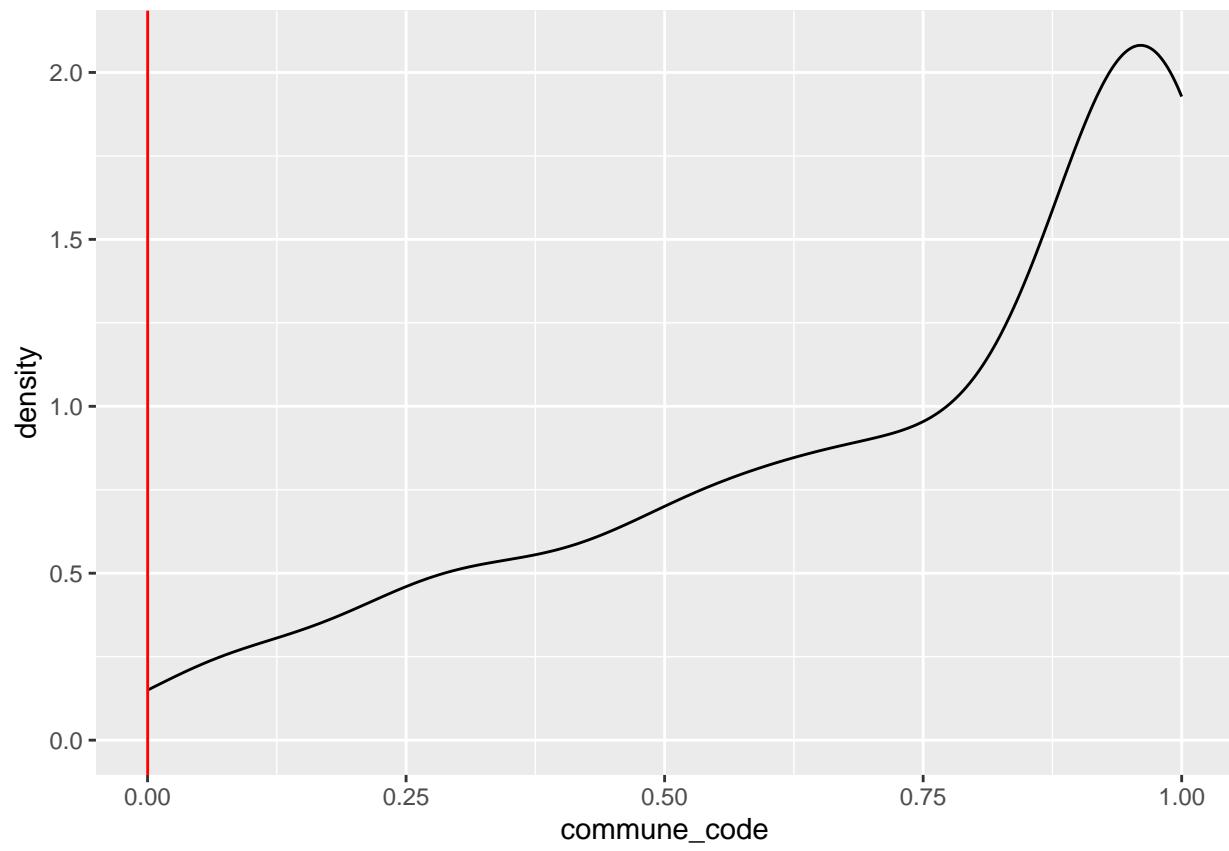
Matching of school record to clinical record by sex



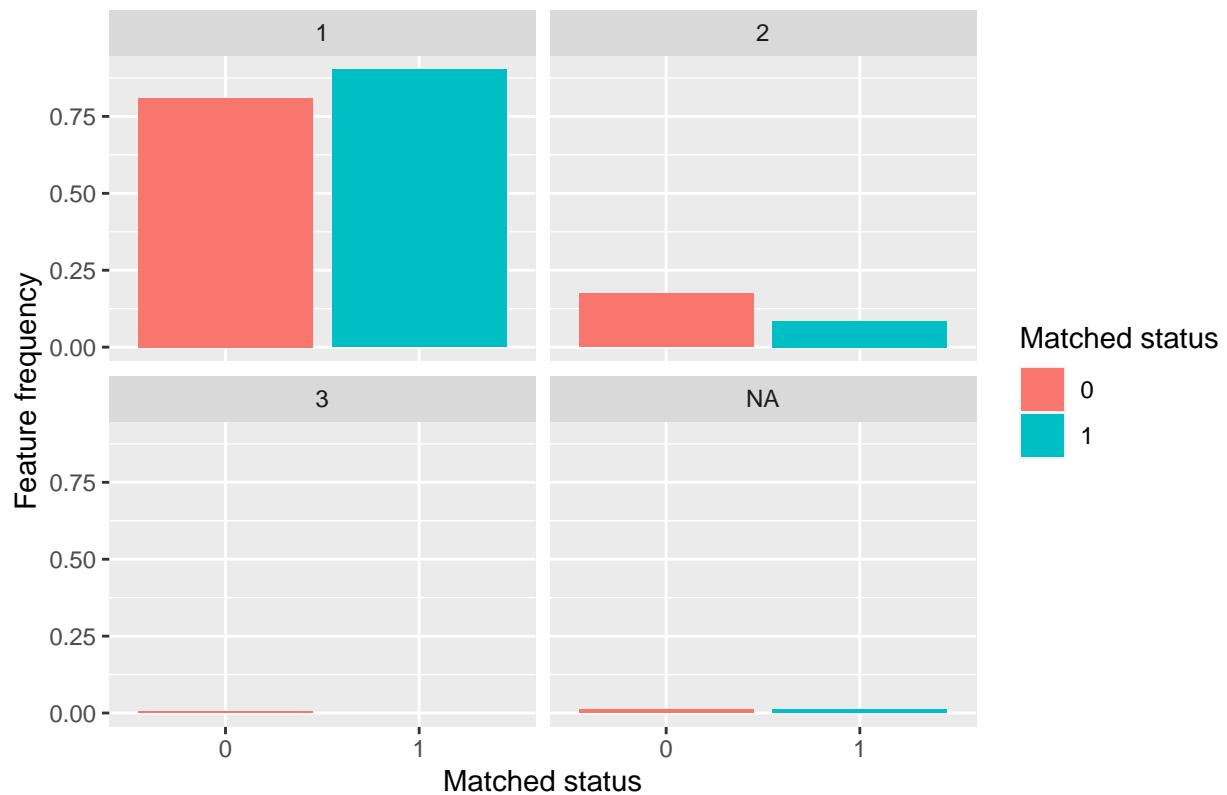


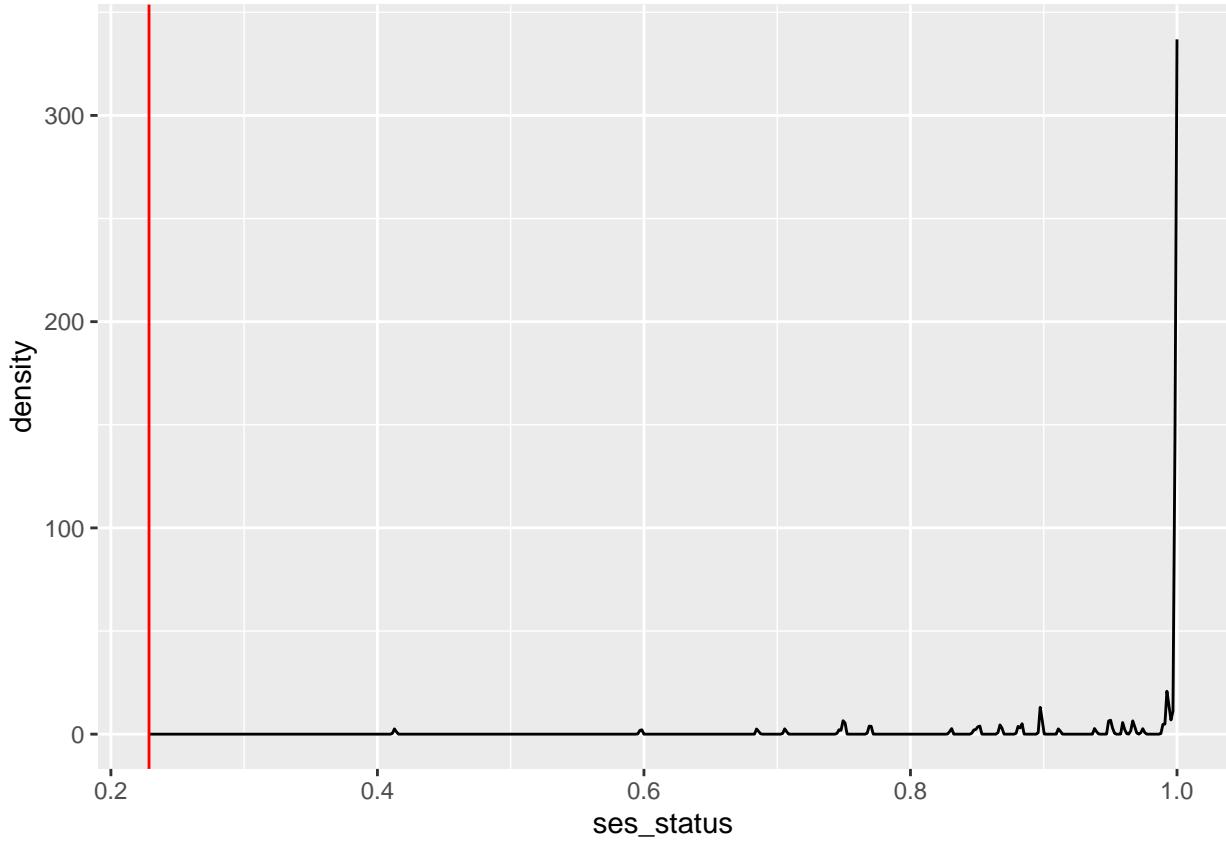
Matching of school record to clinical record by commune





Matching of school record to clinical record by SES status





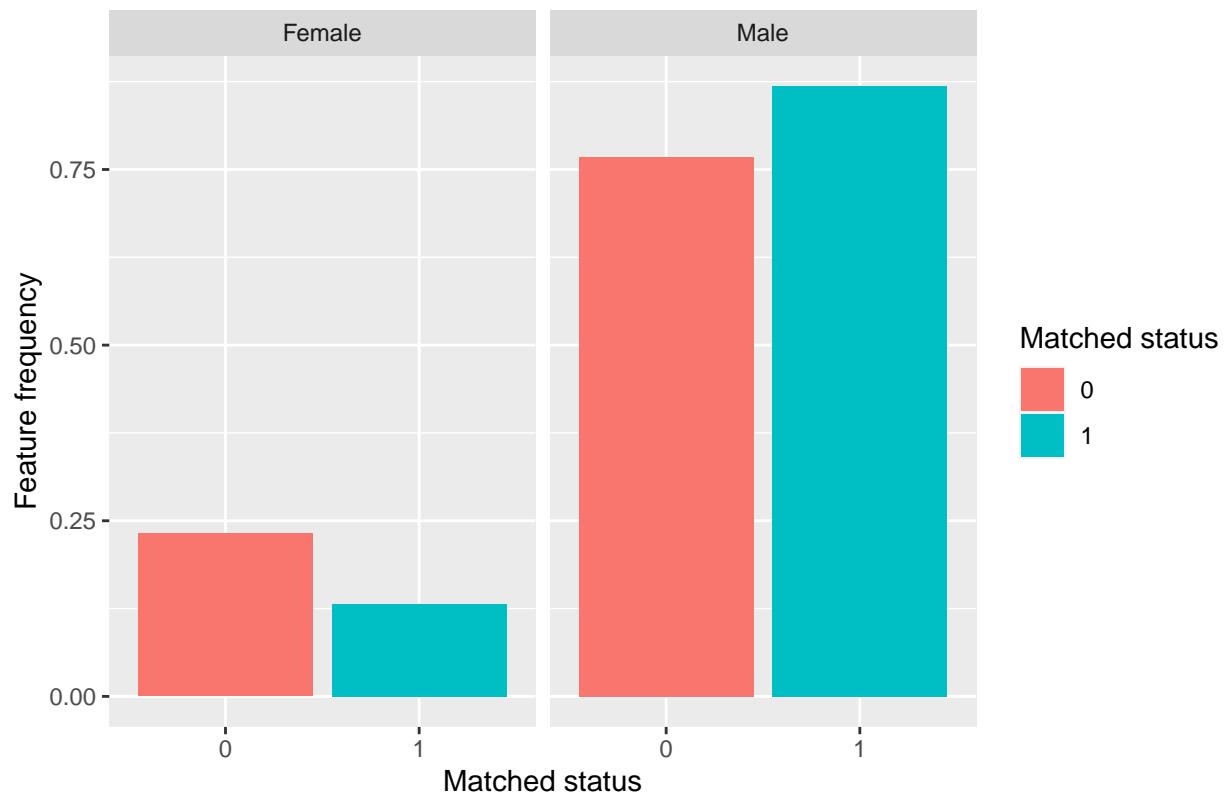
Bit easier to match SES status of 1 (probably more common)

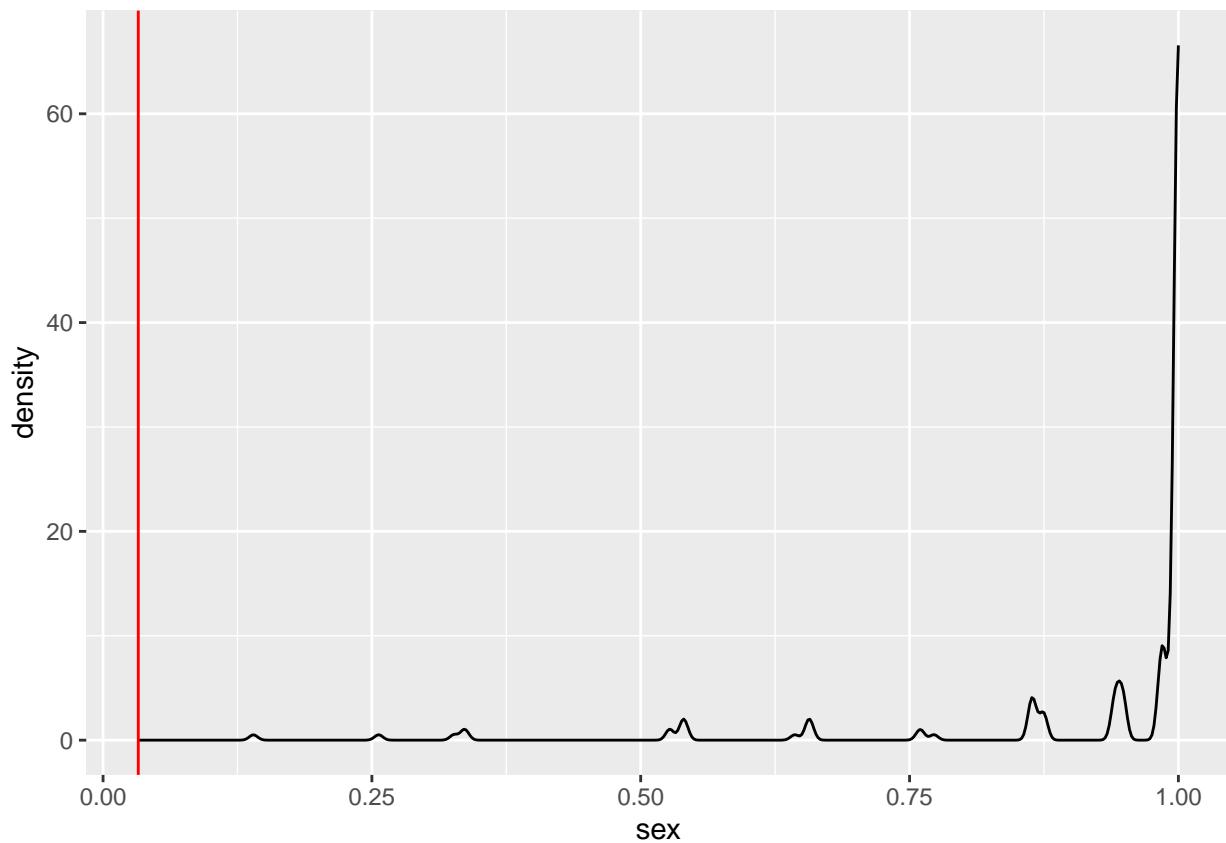
Our matched/non-matched are not different by sex (p-value in Kolmog is same as most of distribution of permuted pvals) but are different by commune and ses status. Cohen's D test isn't suitable to compare the matched and un-matched because the data don't have standard deviations.

??Add commune maps here with size of sample for school and clinical?? Also size of other features.

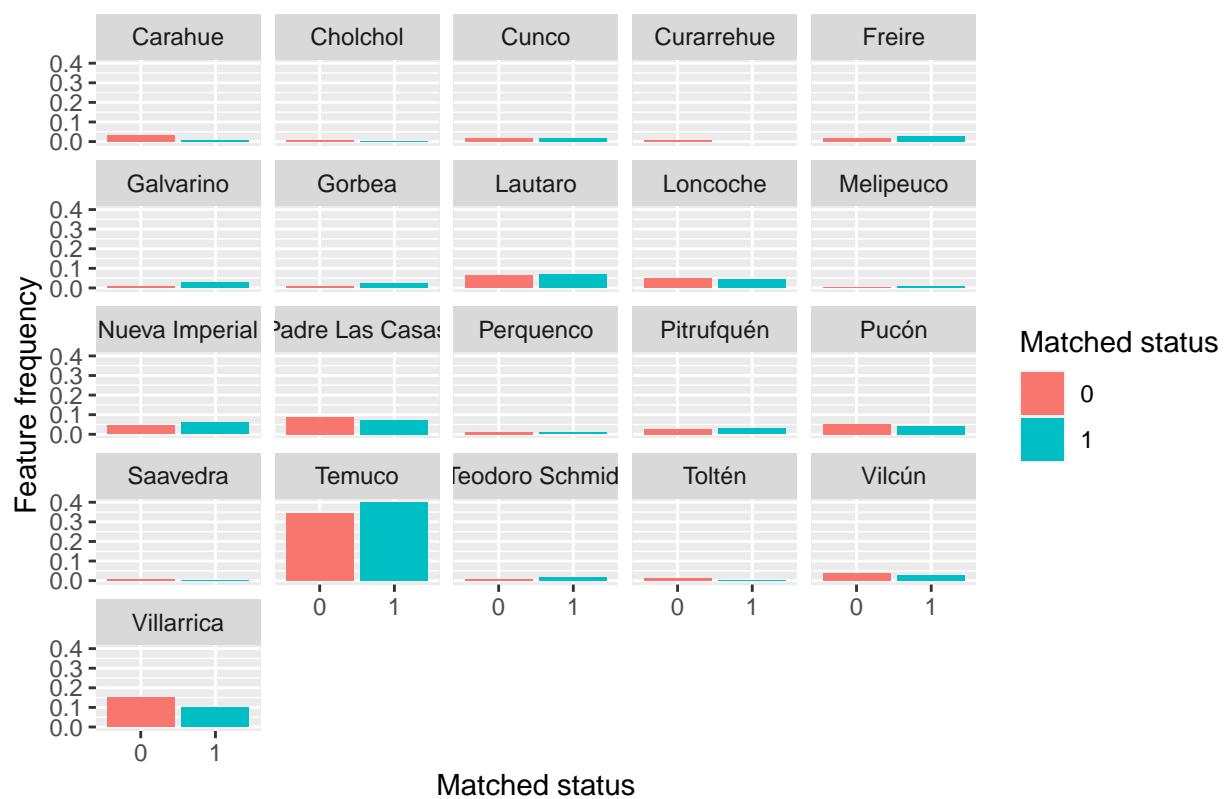
```
##  
## Two-sample Kolmogorov-Smirnov test  
##  
## data: na.omit(patients_yes$sex.patient) and na.omit(patients_no$sex.patient)  
## D = 0.10057, p-value = 0.03276  
## alternative hypothesis: two-sided  
  
##  
## Two-sample Kolmogorov-Smirnov test  
##  
## data: as.numeric(na.omit(patients_yes$ses_status.patient)) and as.numeric(na.omit(patients_no$ses_s  
## D = 0.06734, p-value = 0.3153  
## alternative hypothesis: two-sided  
  
##  
## Two-sample Kolmogorov-Smirnov test  
##  
## data: as.numeric(na.omit(patients_yes$commune_code)) and as.numeric(na.omit(patients_no$commune_code))  
## D = 0.084804, p-value = 0.1074  
## alternative hypothesis: two-sided
```

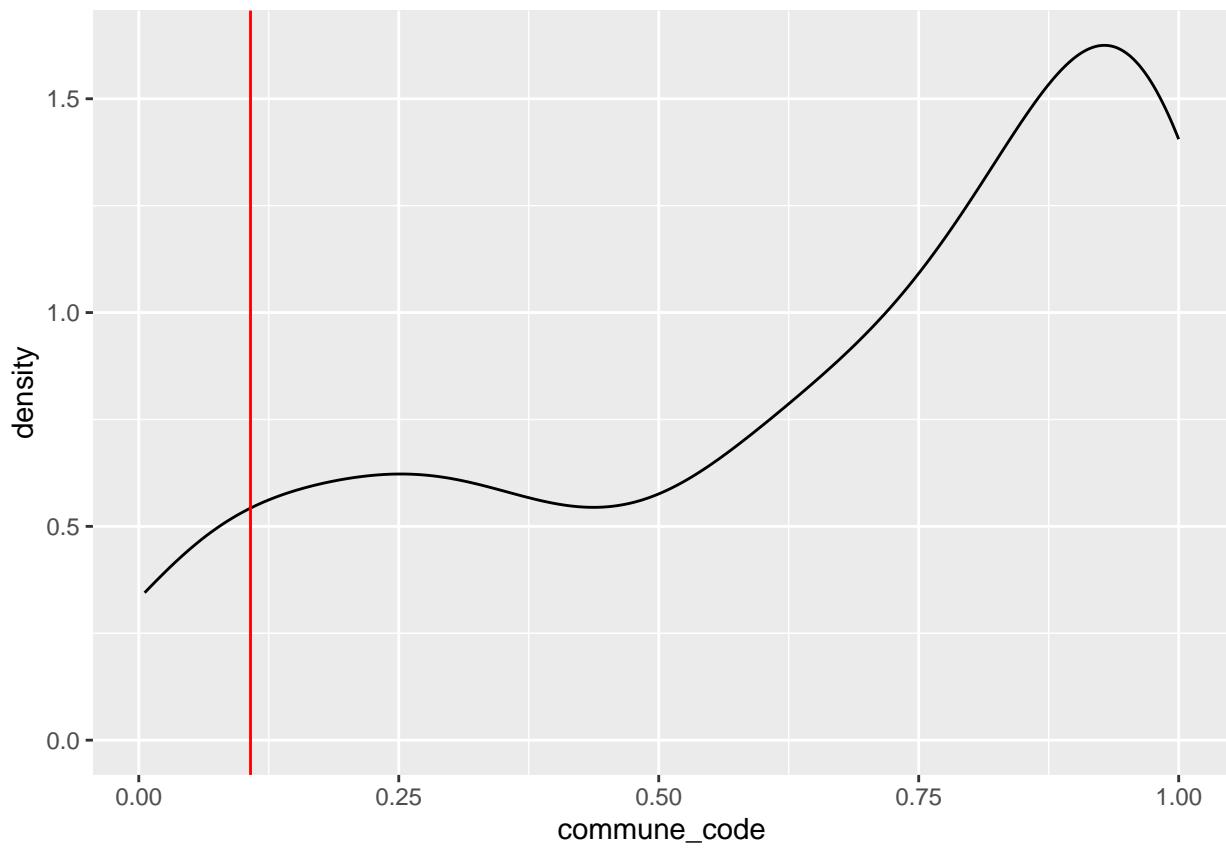
Matching of clinical record to school record by sex



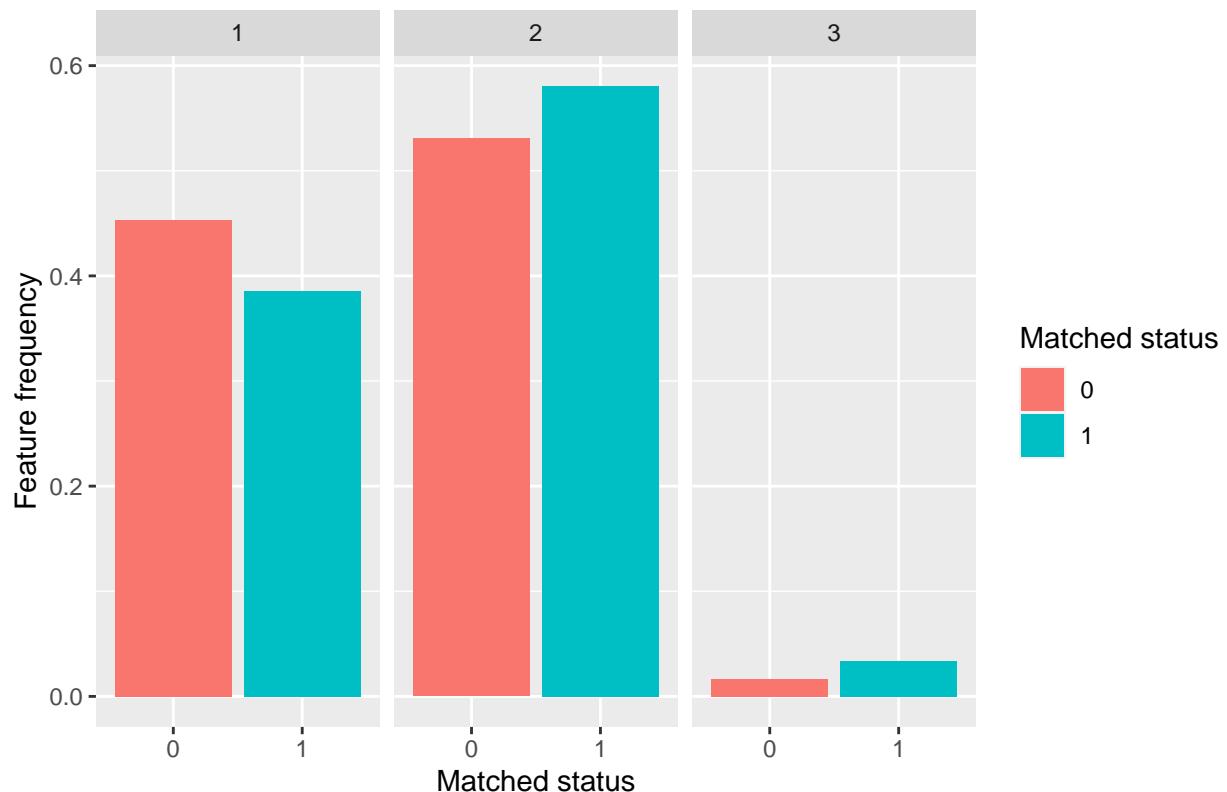


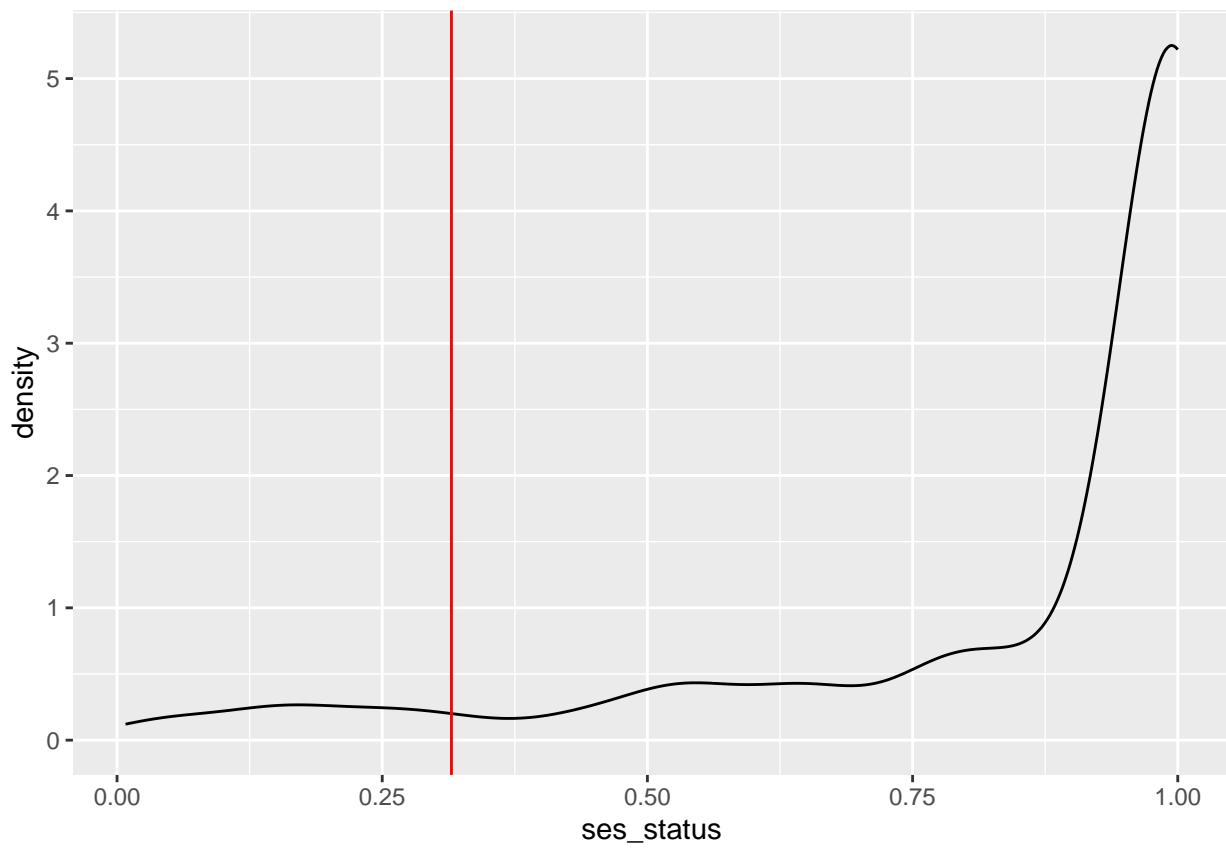
Matching of clinical record to school record by commune





Matching of clinical record to school record by SES status



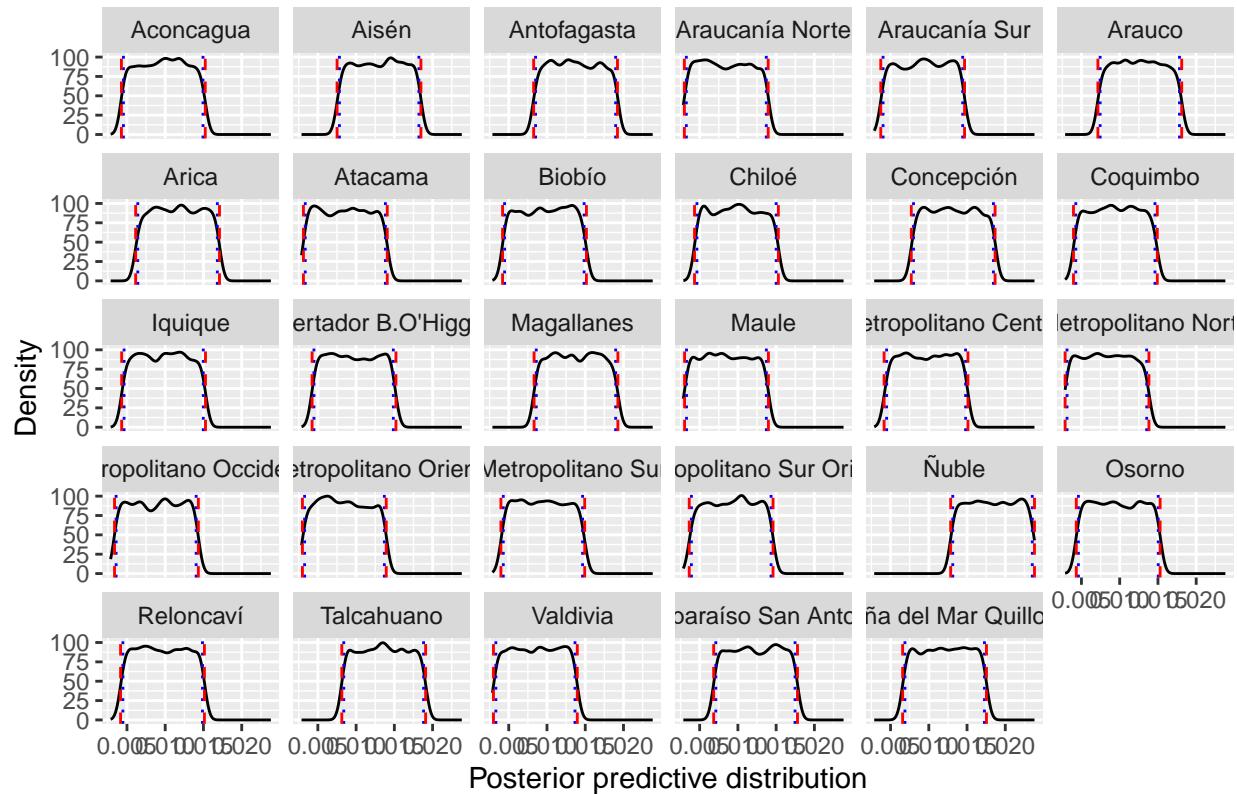


TODO - comment on whether any of the matched patients had only intellectual disability and not autism.

5.5.3 Prev delta

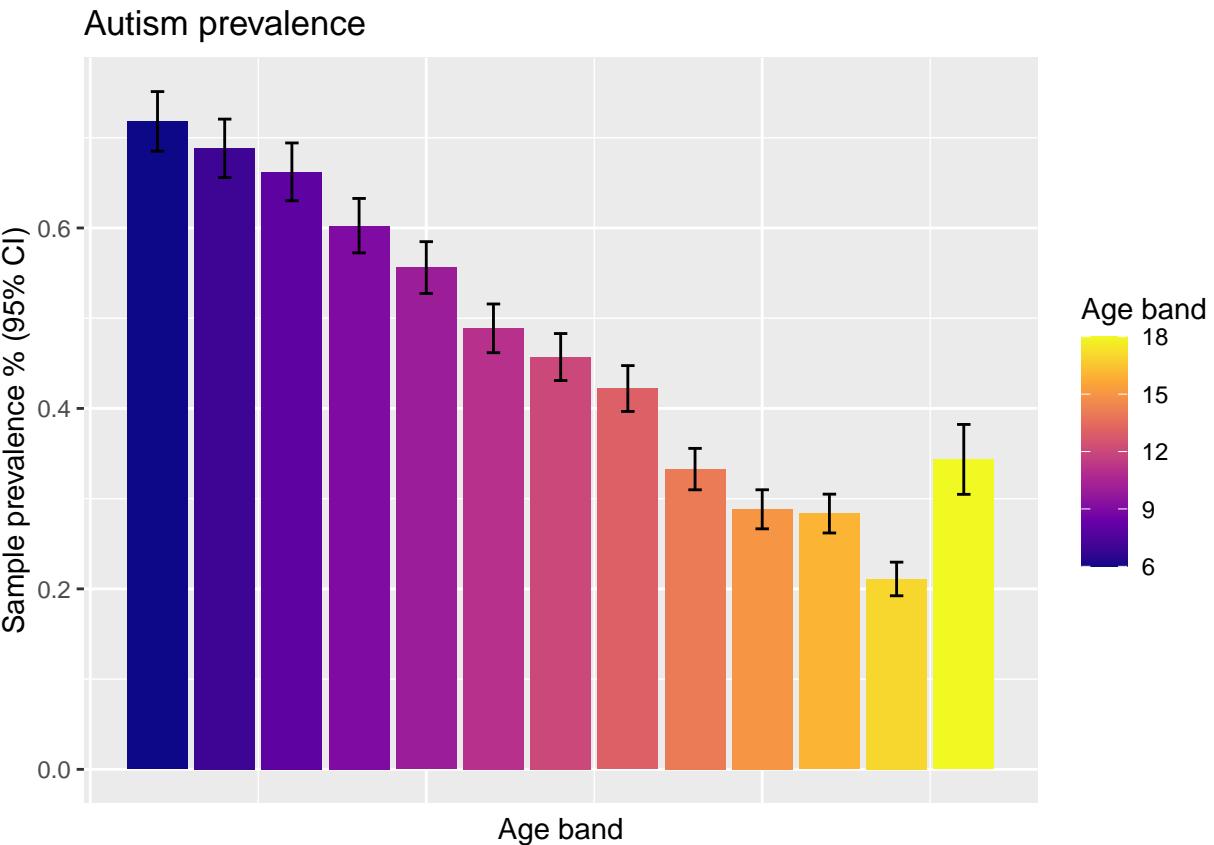
5.6 Bayesian prevalence projection

Region specific priors informed by clinical data from Araucanía Sur

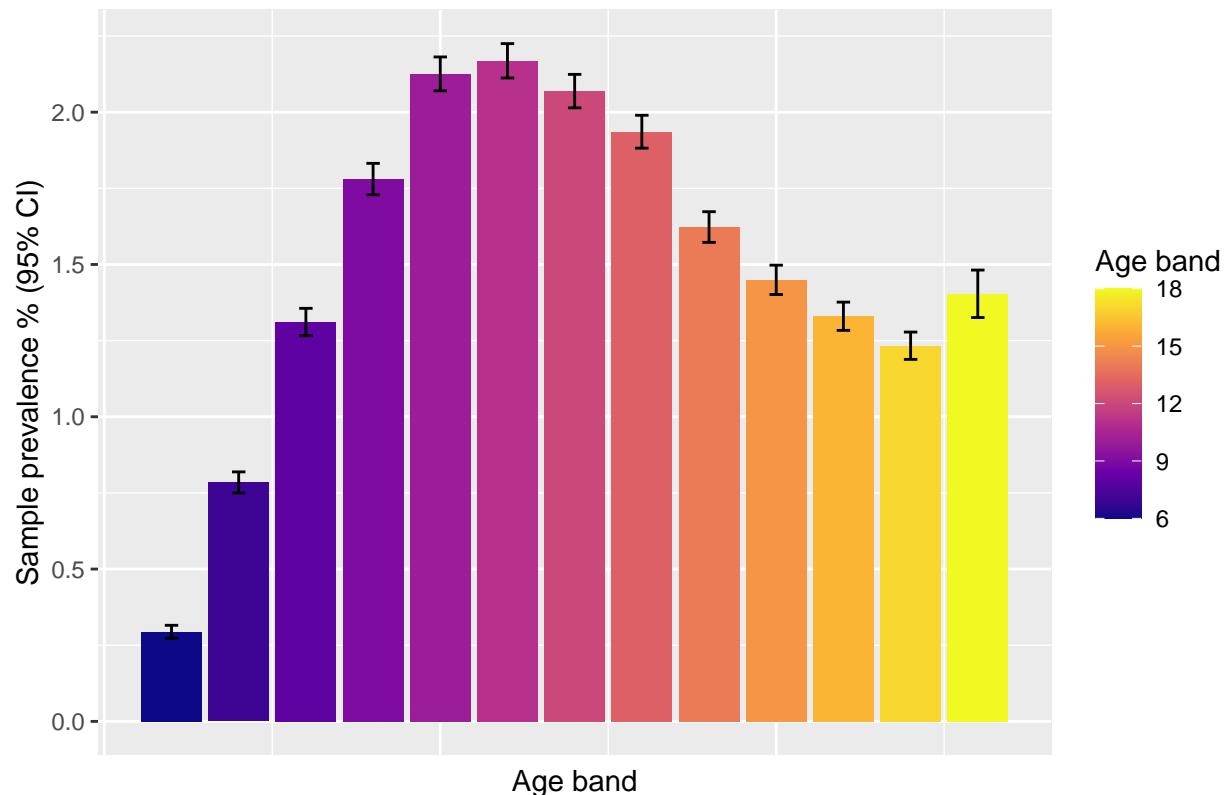


Red is the prior 95% CI (adjusted sample rate and it + prev_delta), blue is posterior 95% CrI

6 Supplementary materials



ADHD prevalence



6.1 Bayesian prevalence estimation

6.1.1 Random effect on sex

6.1.2 Random effect on health service

6.1.3 Random effect on commune in Araucanía Sur health service

6.1.4 Random effect on socio-economic status

6.1.5 Random effect on ethnicity

6.1.6 Random effect on school's rurality

6.2 AraucS prevalence

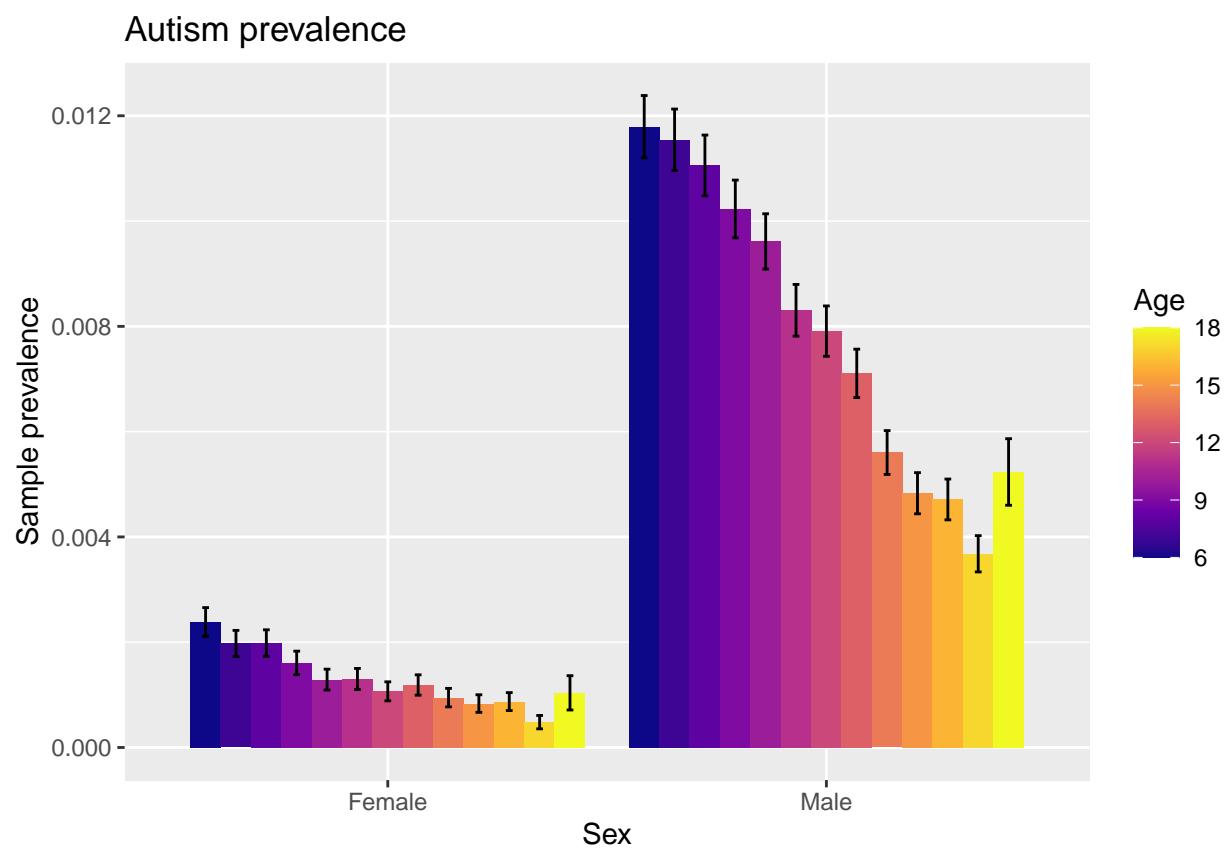


Figure 39: Sample prevalence of autism by age and sex. Bars show 95% normal confidence intervals.

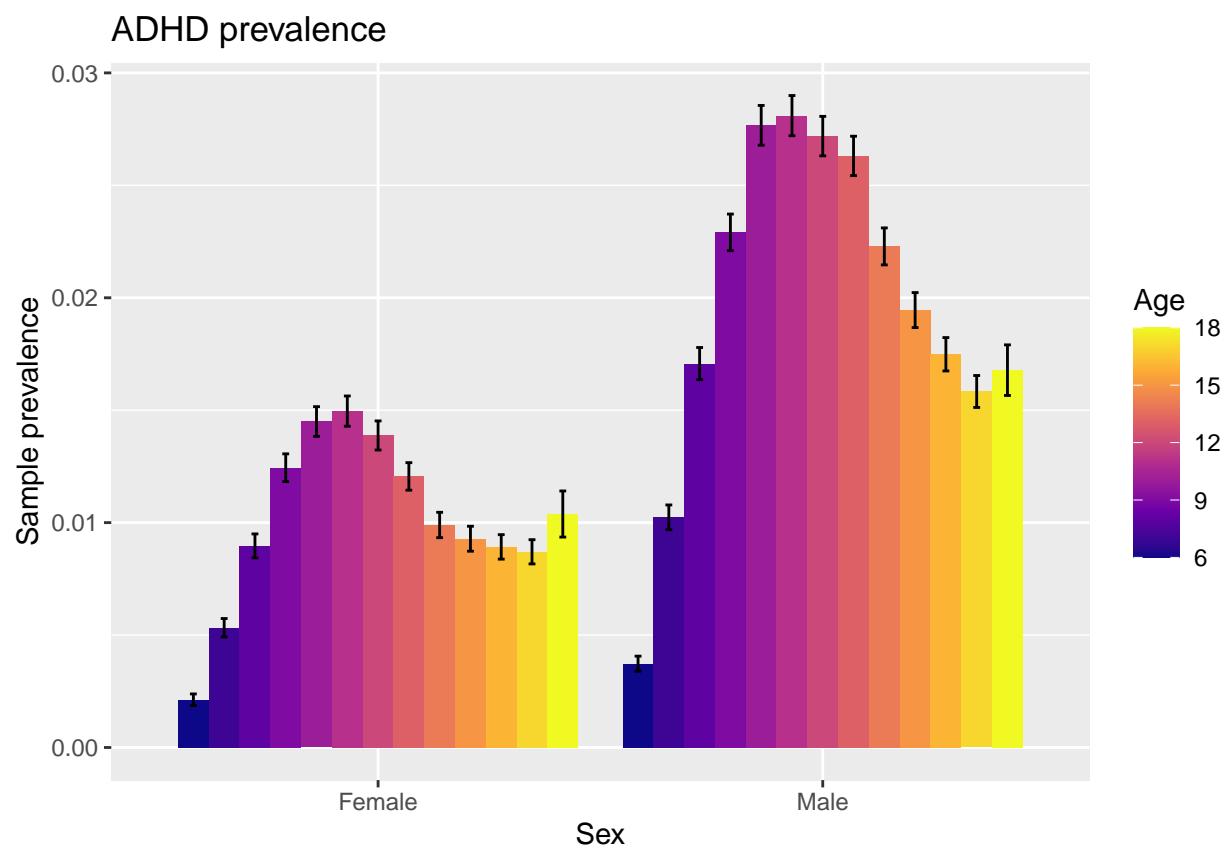


Figure 40: Sample prevalence of ADHD by age and sex. Bars show 95% normal confidence intervals.

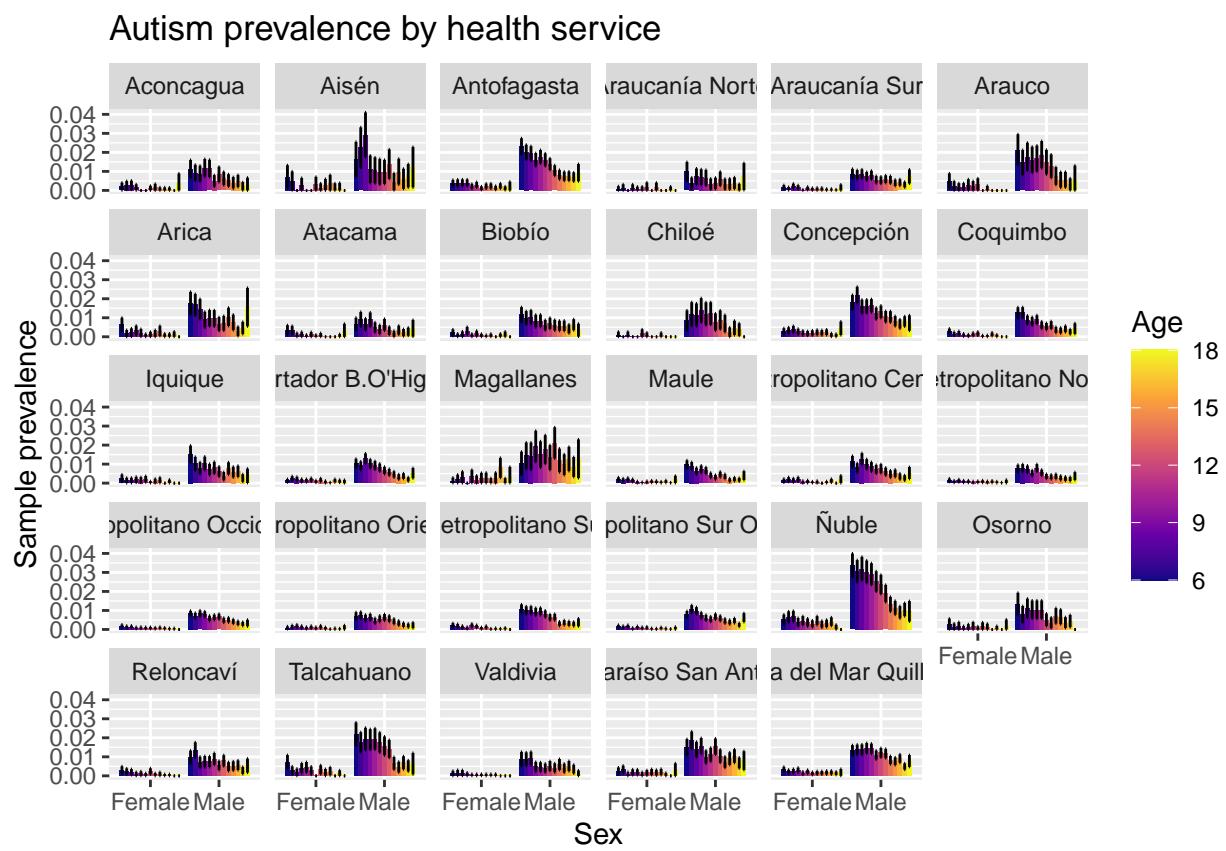


Figure 41: Sample prevalence of autism by health service, age and sex. Bars show 95% normal confidence intervals.

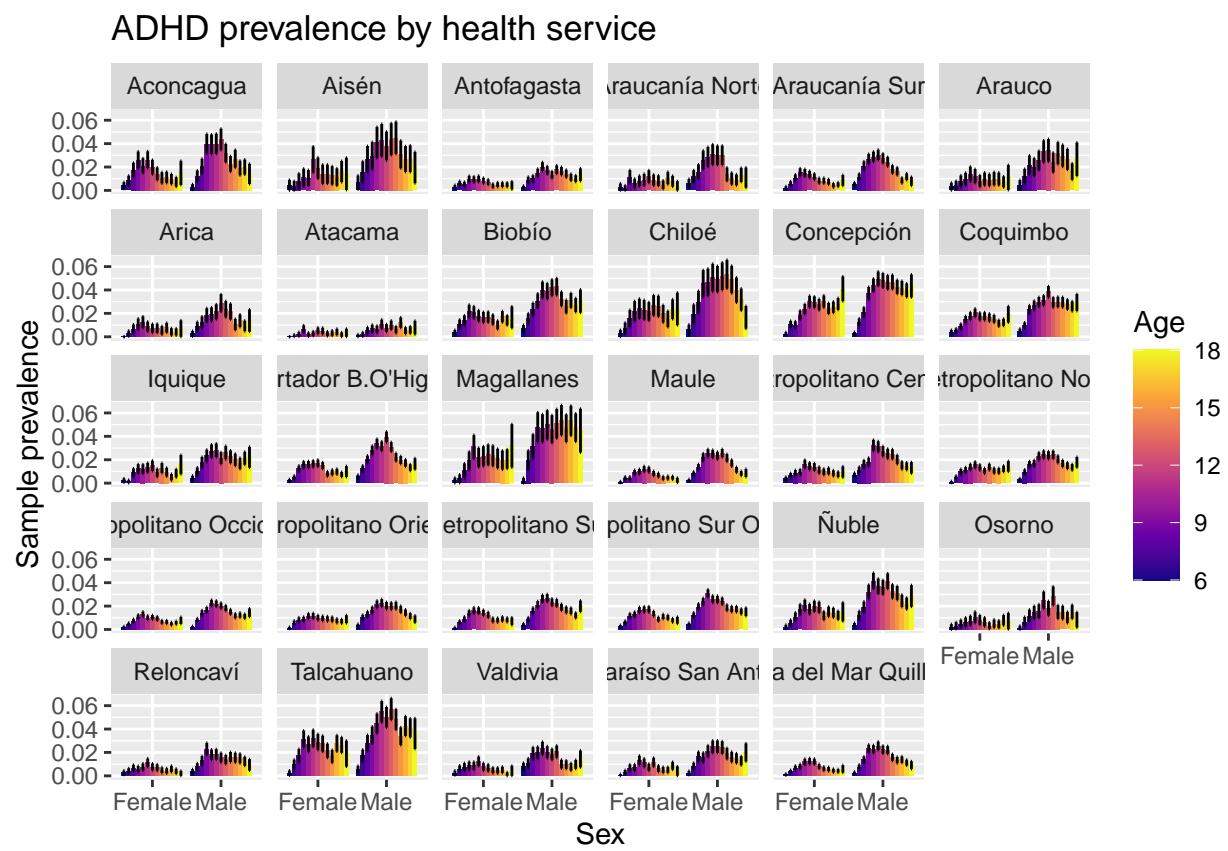


Figure 42: Sample prevalence of ADHD by health service, age and sex. Bars show 95% normal confidence intervals.

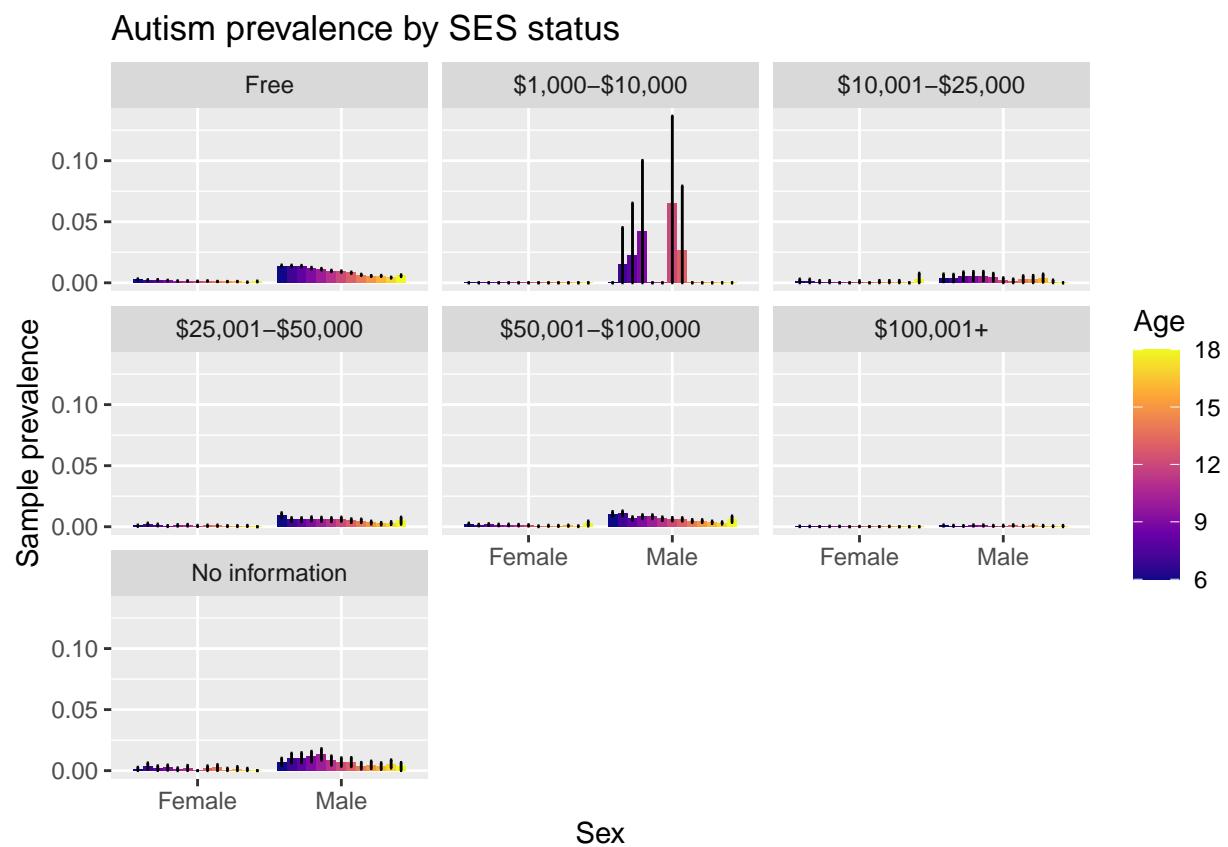


Figure 43: Sample prevalence of autism by socio-economic (SES) status of student's family, age and sex. Bars show 95% normal confidence intervals.

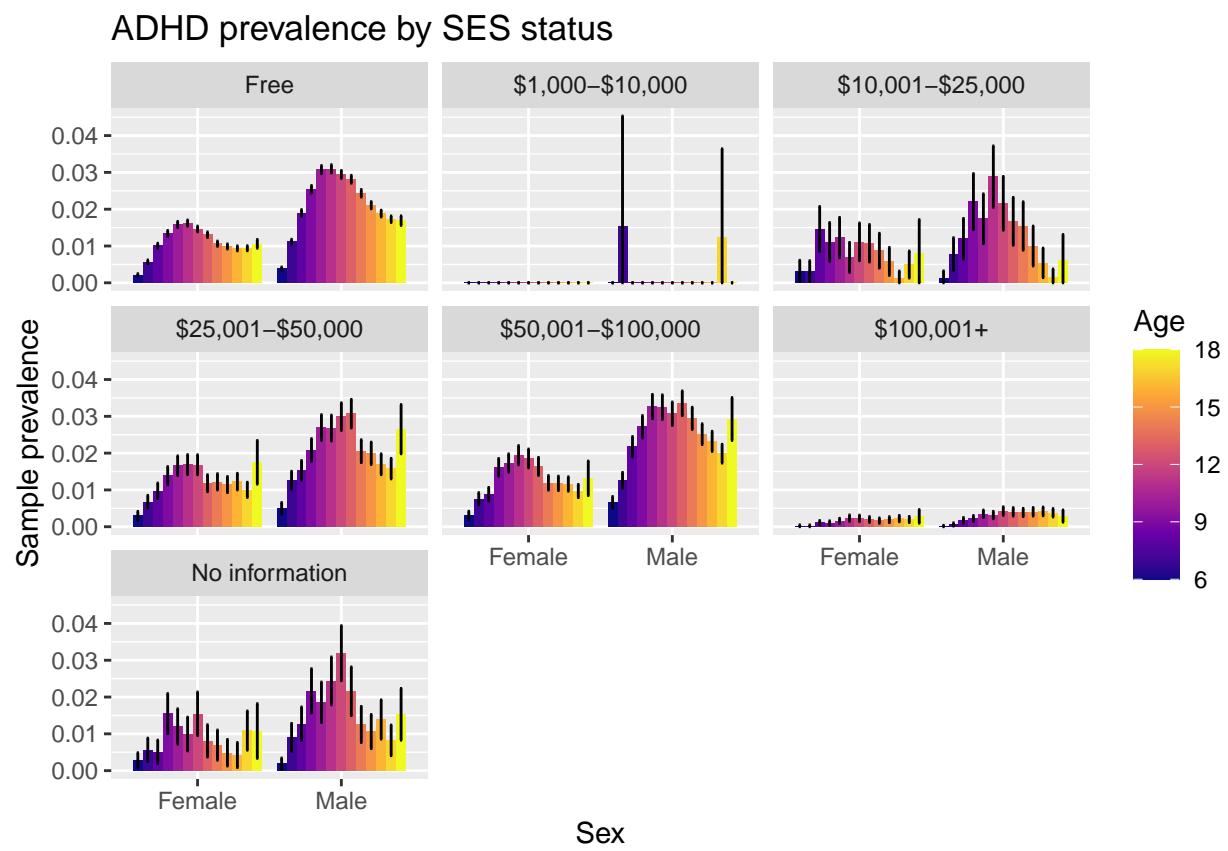


Figure 44: Sample prevalence of ADHD by socio-economic (SES) status of student's family, age and sex. Bars show 95% normal confidence intervals.

Autism prevalence by ethnicity

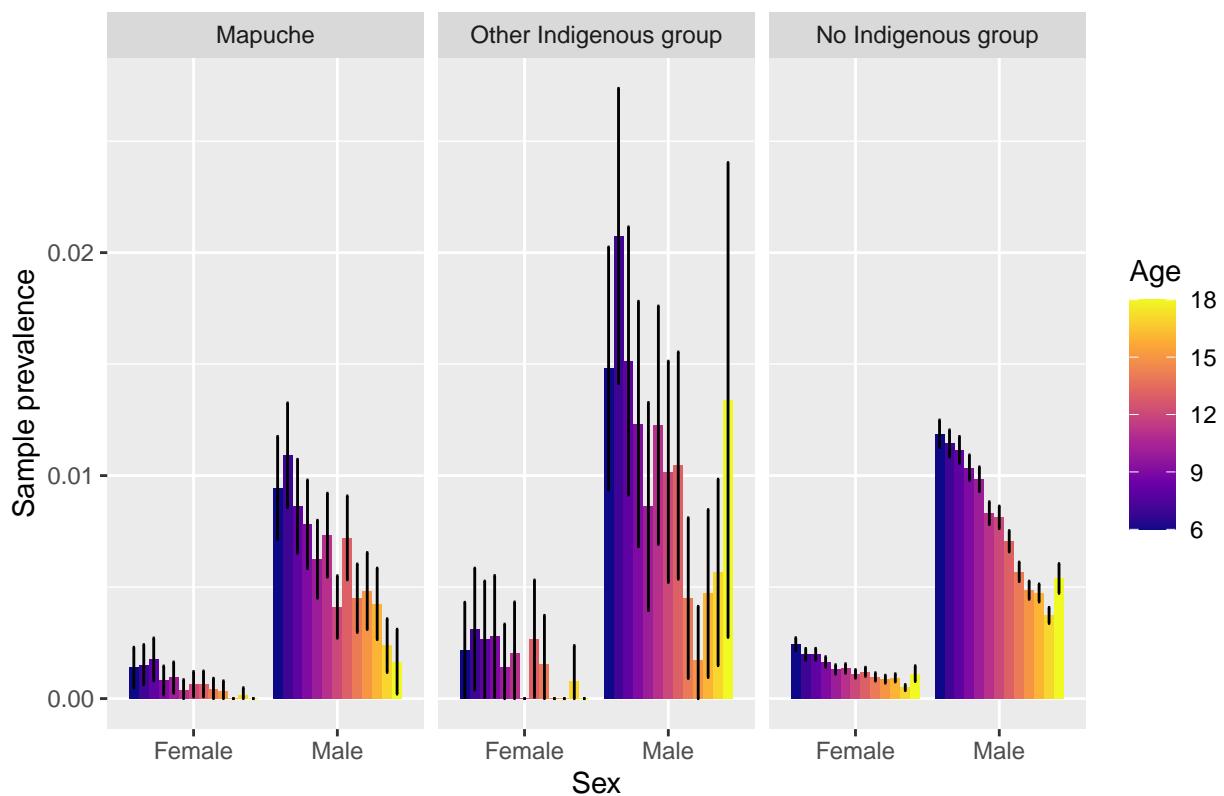


Figure 45: Sample prevalence of autism by ethnicity, age and sex. Bars show 95% normal confidence intervals.

ADHD prevalence by ethnicity

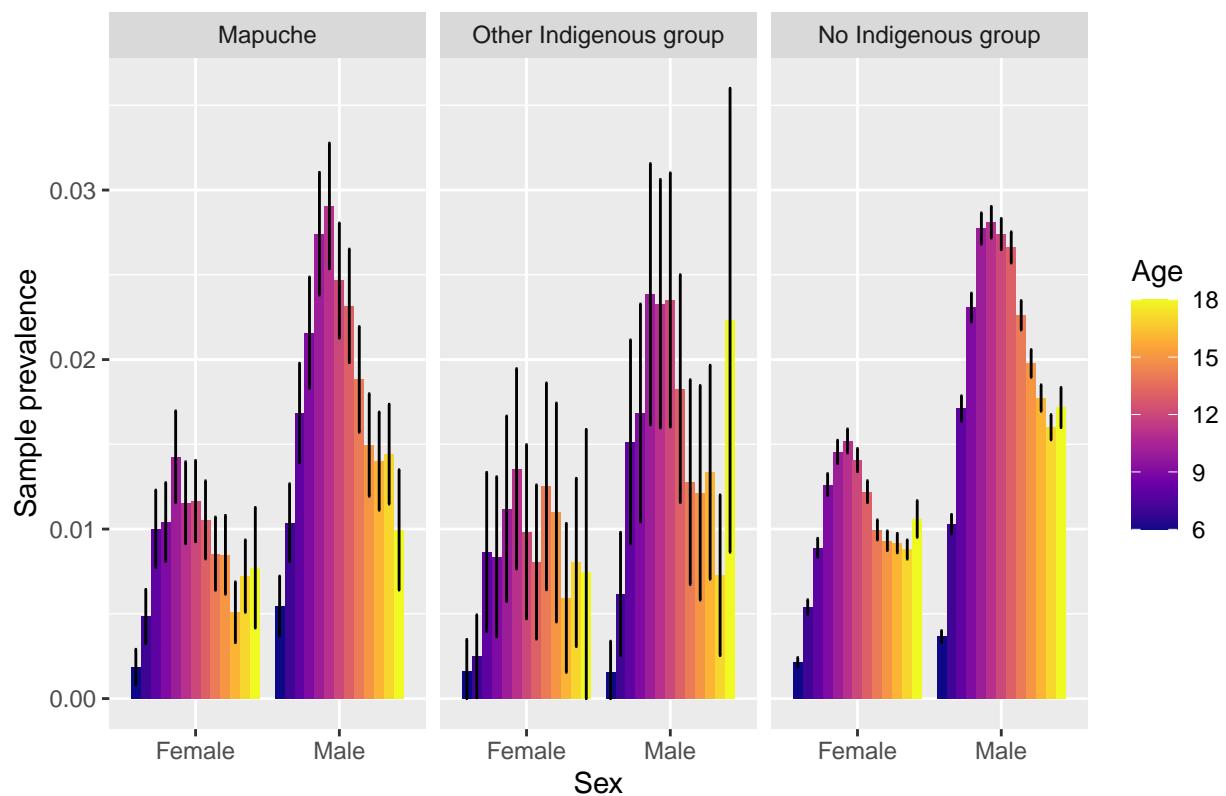


Figure 46: Sample prevalence of ADHD by ethnicity, age and sex. Bars show 95% normal confidence intervals.

Autism prevalence by school's rurality

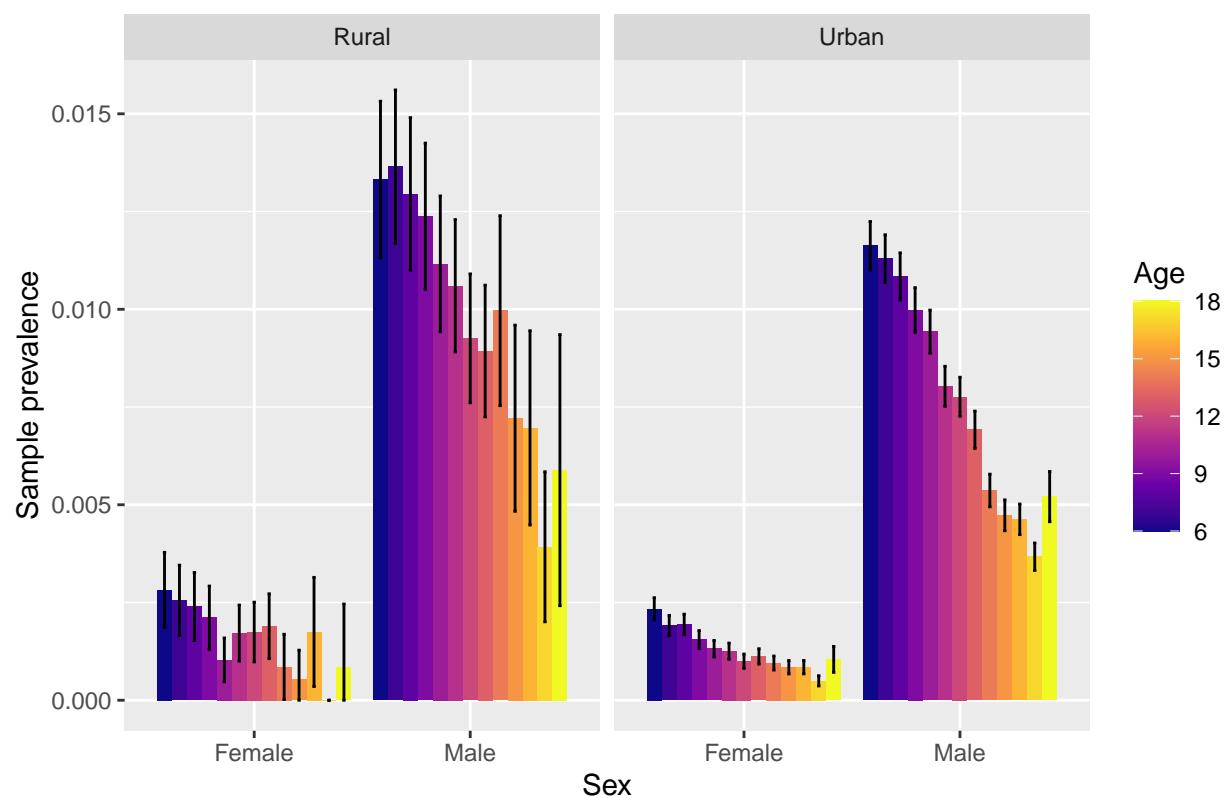


Figure 47: Sample prevalence of autism by school's rurality, age and sex. Bars show 95% normal confidence intervals.

ADHD prevalence by school's rurality

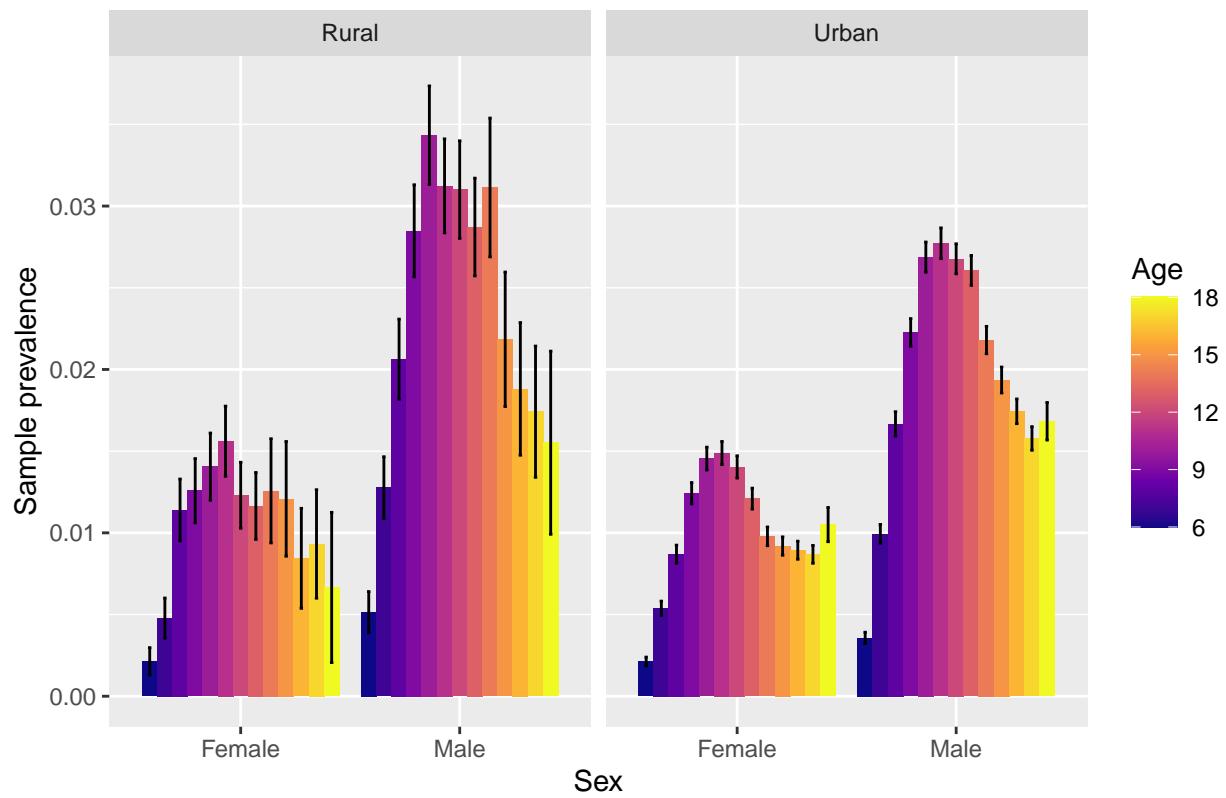


Figure 48: Sample prevalence of ADHD by school's rurality, age and sex. Bars show 95% normal confidence intervals.

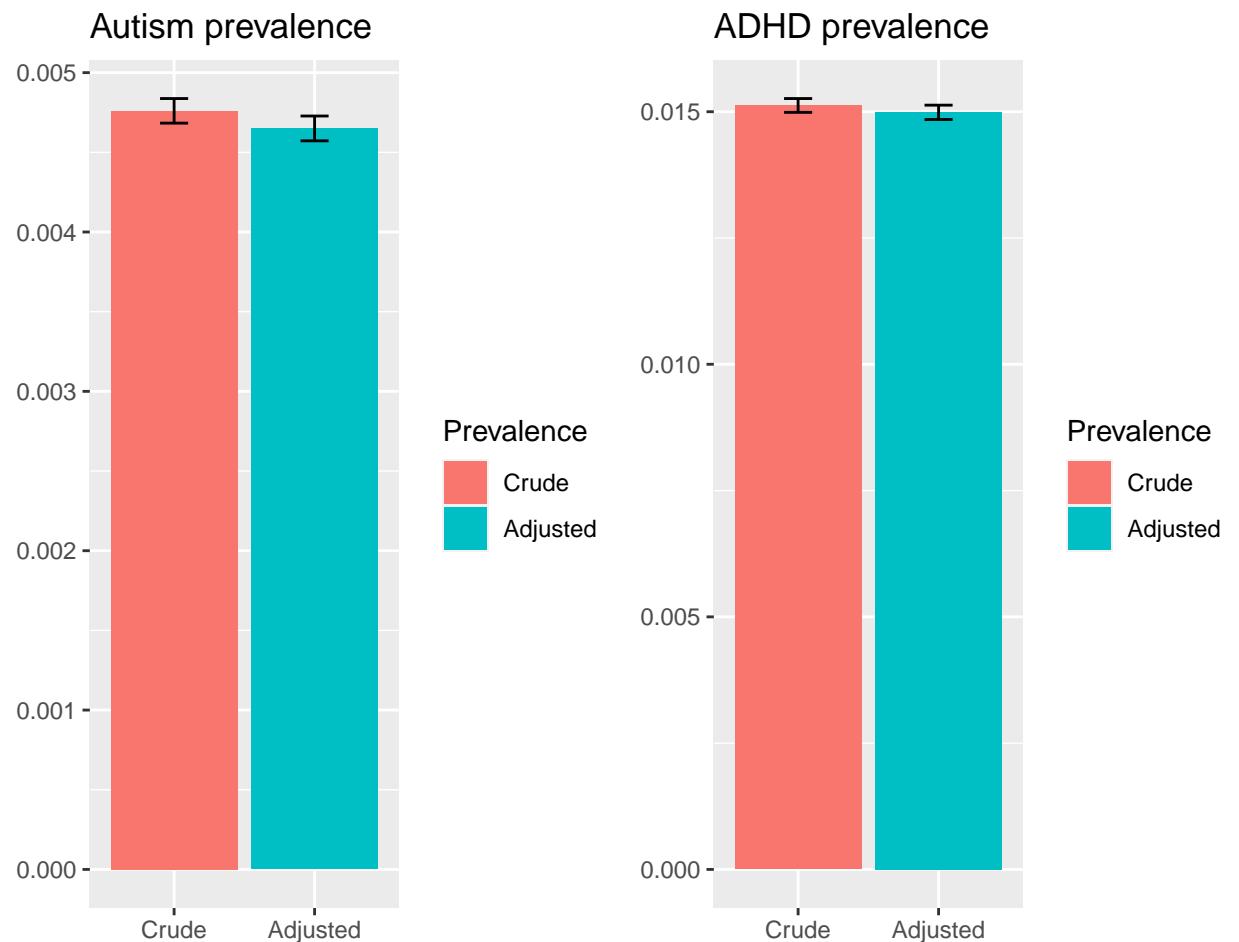


Figure 49: Crude and age- and sex-adjusted sample prevalences of autism and ADHD. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

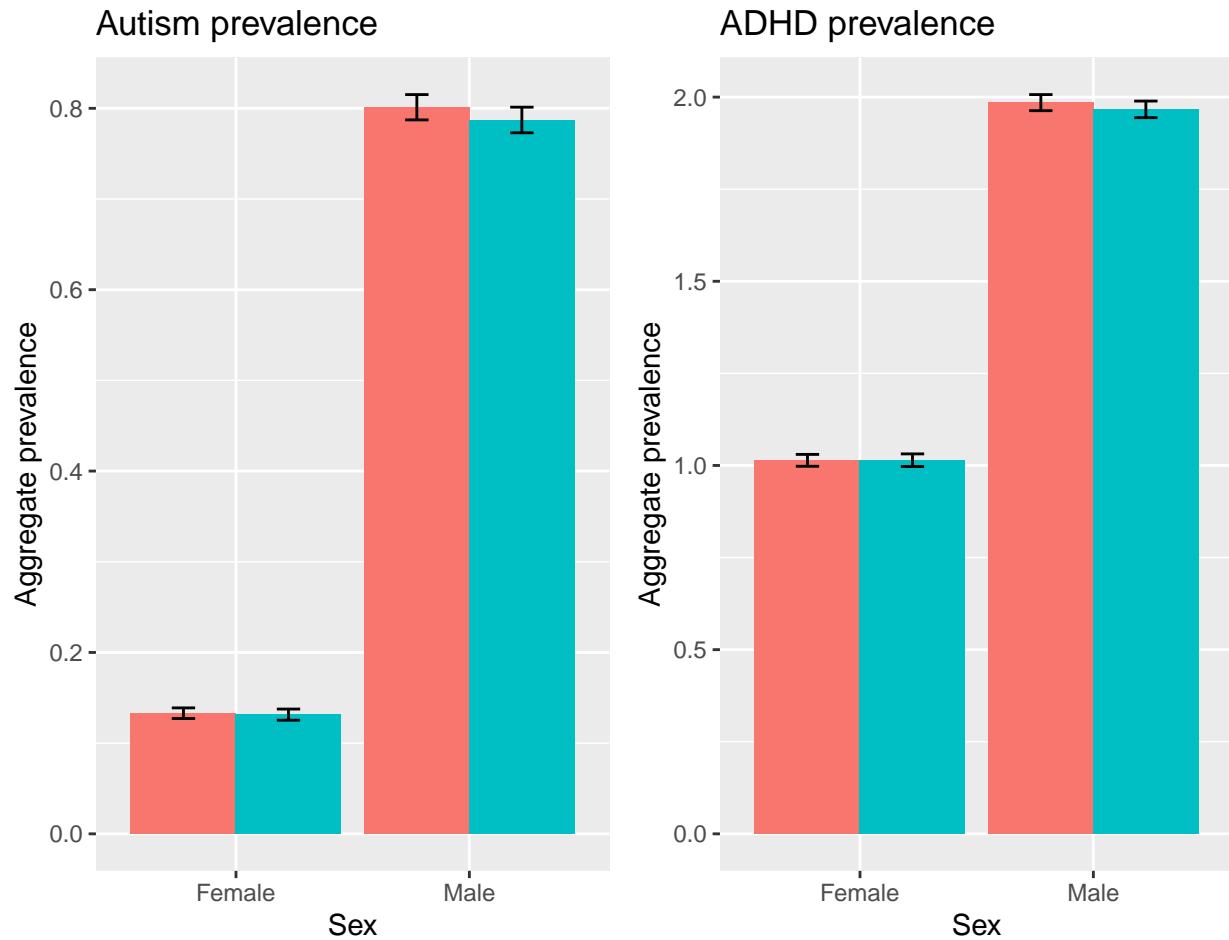


Figure 50: Crude and age- and sex-adjusted sample prevalences of autism and ADHD by sex. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

Autism prevalence by health service



Figure 51: Crude and age- and sex-adjusted sample prevalences of autism by health service. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

ADHD prevalence by health service



Figure 52: Crude and age- and sex-adjusted sample prevalences of ADHD by health service. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

Autism prevalence by SES status

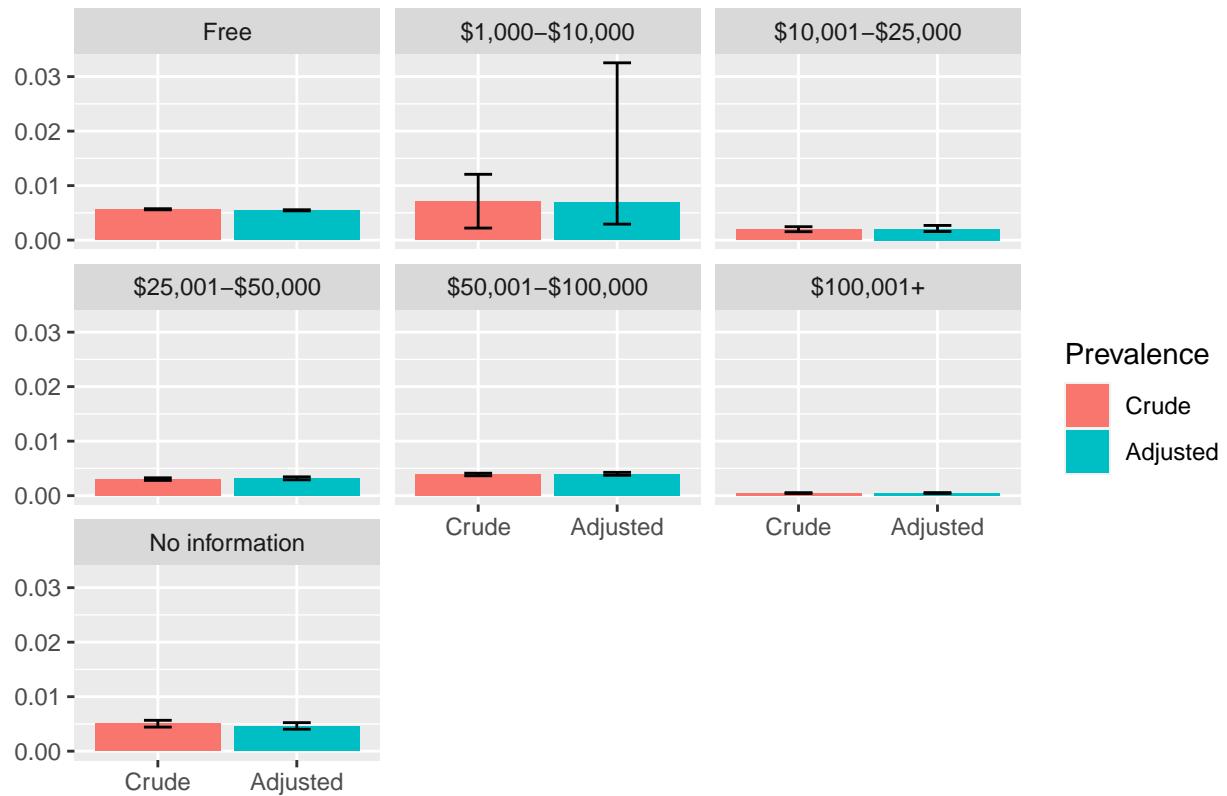


Figure 53: Crude and age- and sex-adjusted sample prevalences of autism by socio-economic (SES) status of student's family. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

ADHD prevalence by SES status



Figure 54: Crude and age- and sex-adjusted sample prevalences of ADHD by socio-economic (SES) status of student's family. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

Autism prevalence by ethnicity

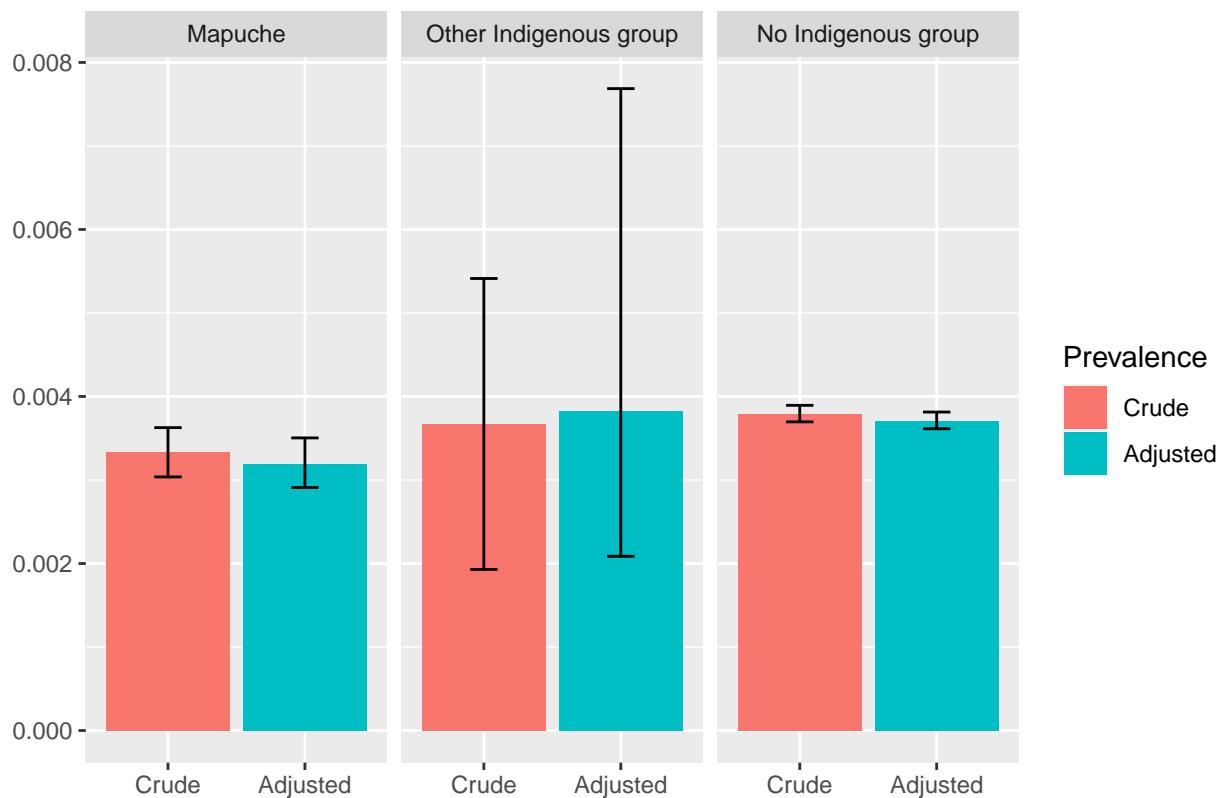


Figure 55: Crude and age- and sex-adjusted sample prevalences of autism by ethnicity. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

ADHD prevalence by ethnicity

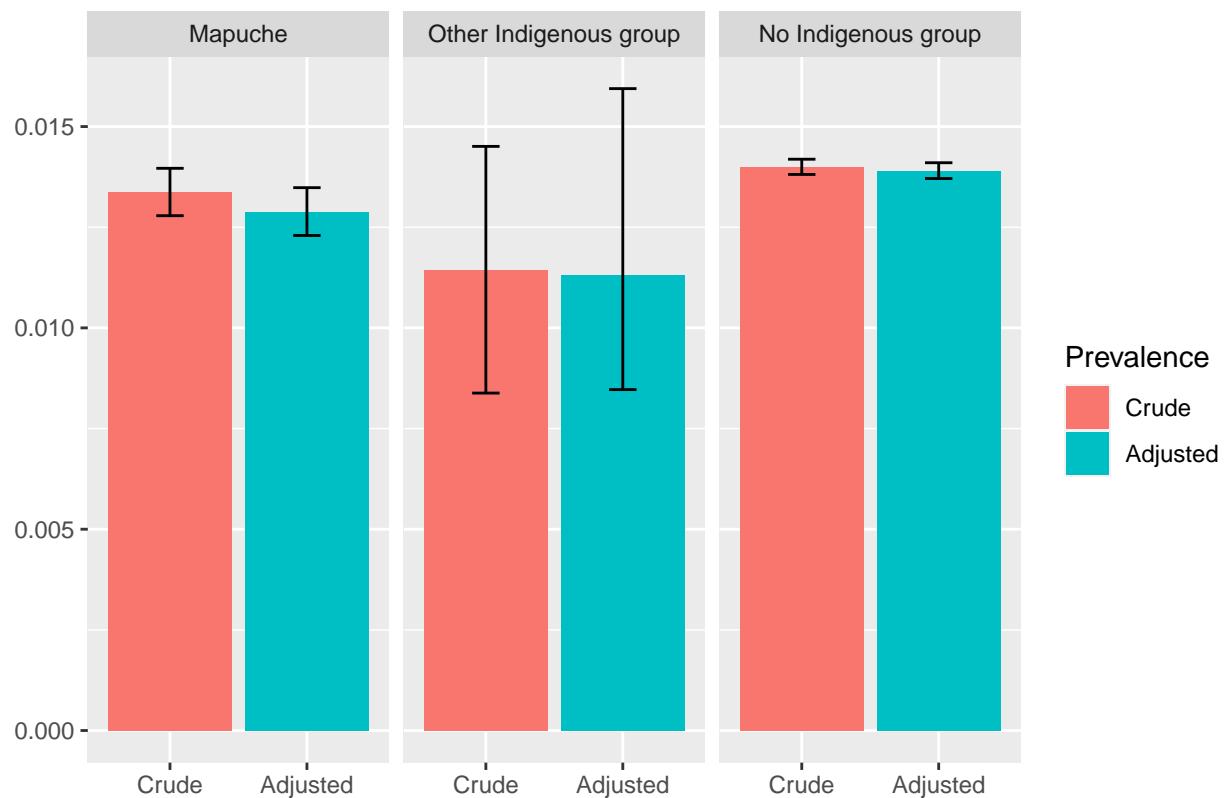


Figure 56: Crude and age- and sex-adjusted sample prevalences of ADHD by ethnicity. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

Autism prevalence by school's rurality

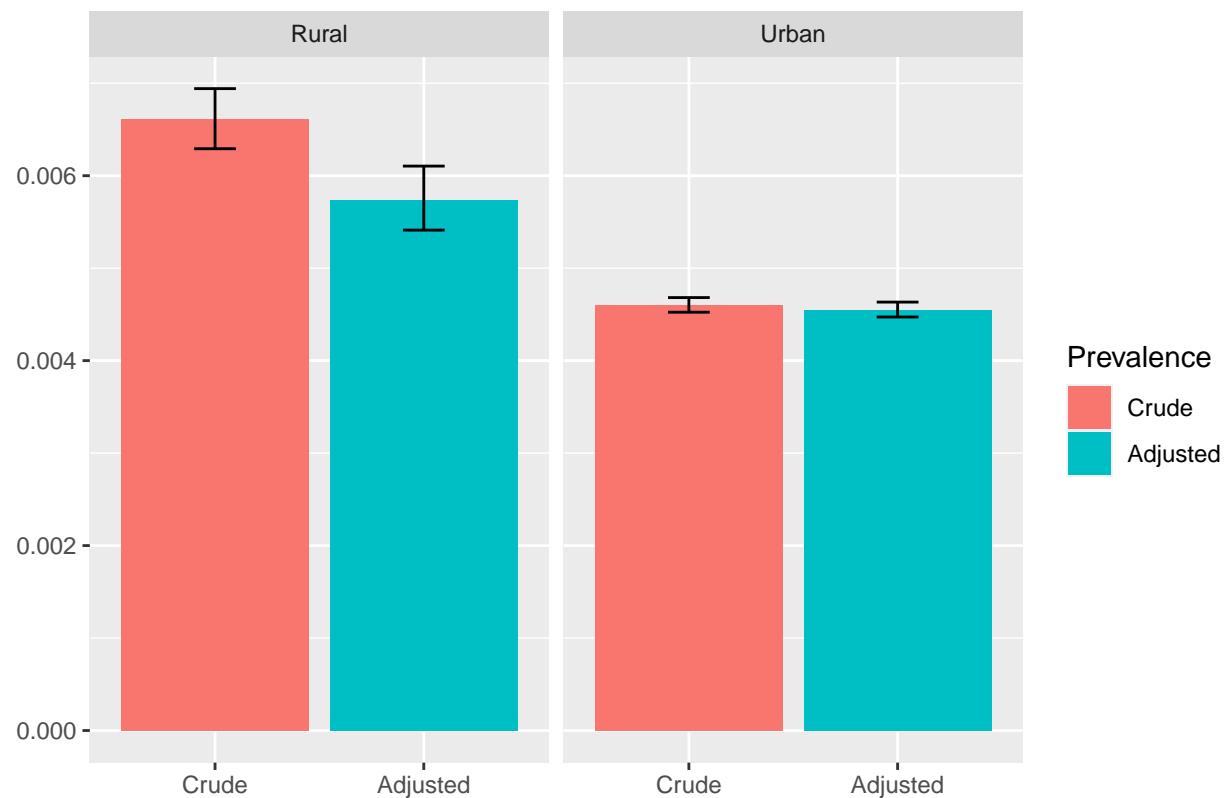


Figure 57: Crude and age- and sex-adjusted sample prevalences of autism by school's rurality. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

ADHD prevalence by rurality

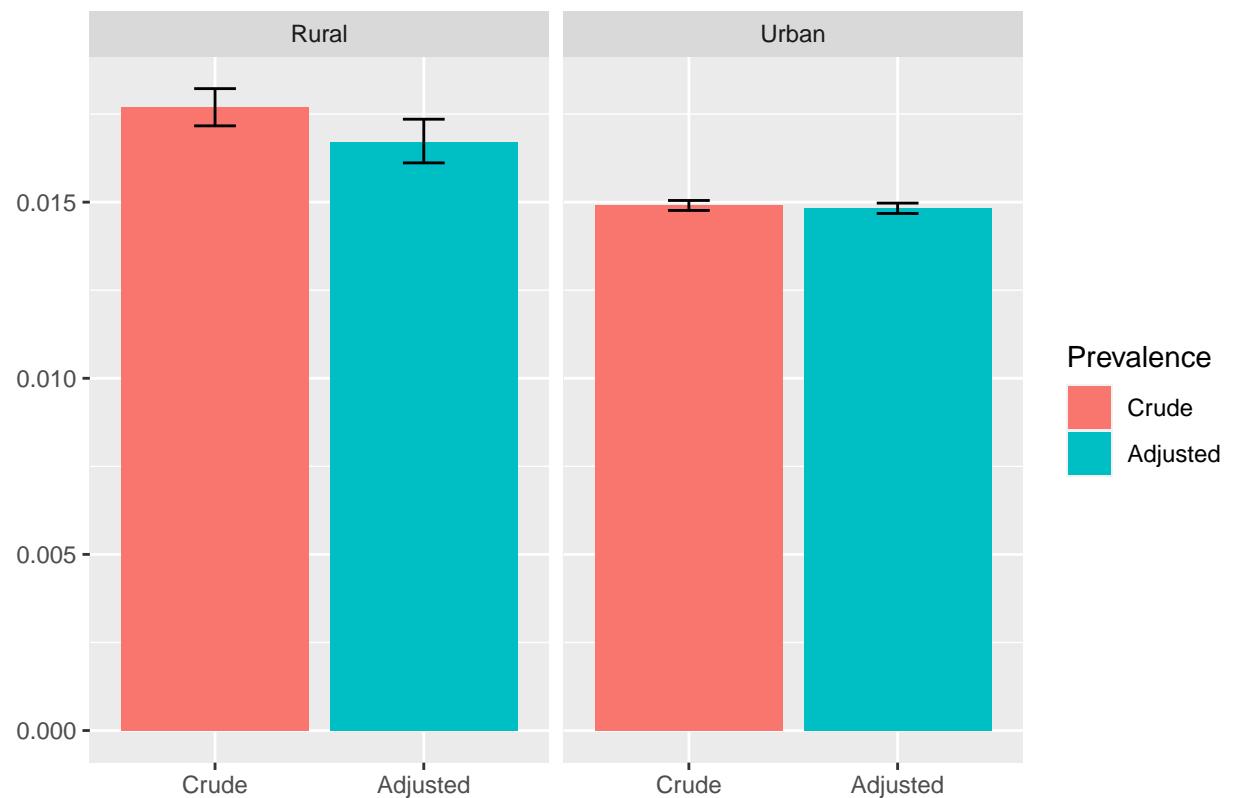


Figure 58: Crude and age- and sex-adjusted sample prevalences of ADHD by school's rurality. Bars for crude prevalence show 95% normal confidence intervals and bars for adjusted prevalence show 95% gamma confidence intervals.

Autism prevalence, prior mean = 0.00465, prior sd = 3.98e-05

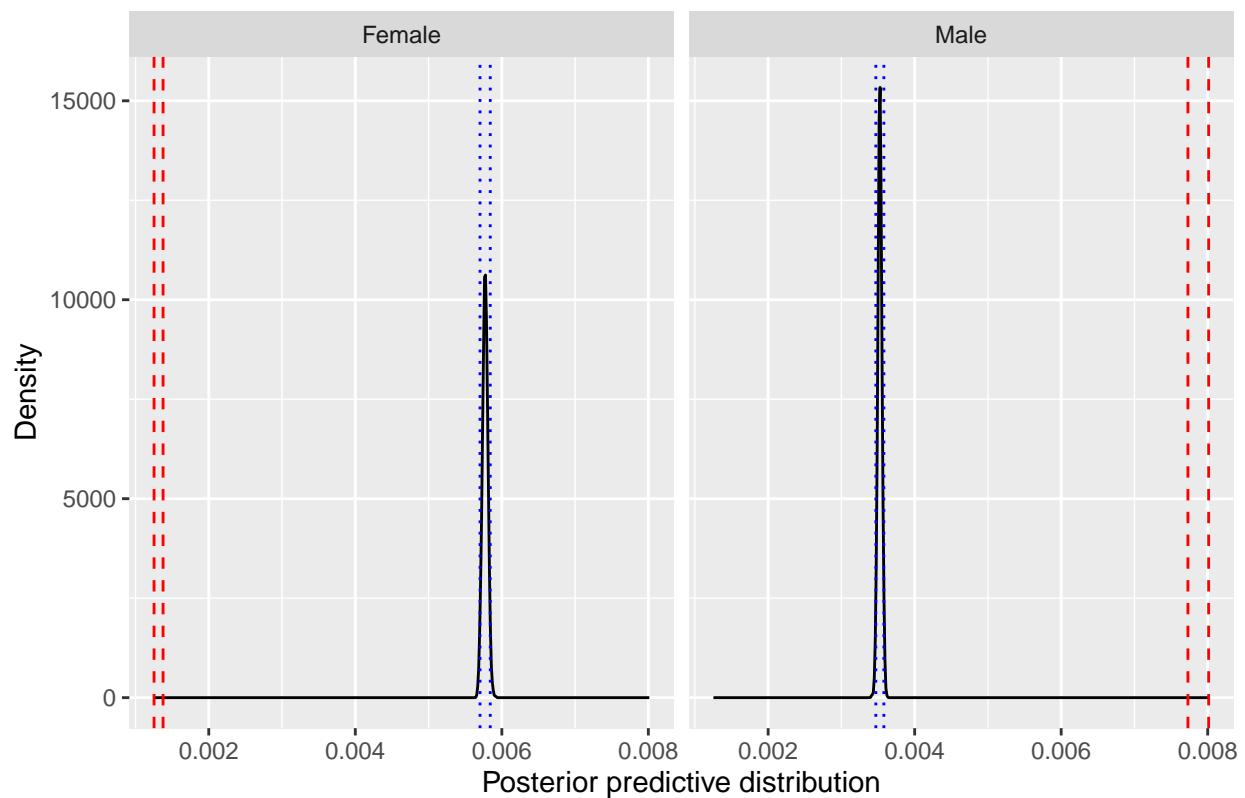


Figure 59: Posterior predictive distribution for autism with a random effect on sex, and with age- and sex-adjusted global prevalence prior.

ADHD prevalence, prior mean = 0.015, prior sd = 7.25e-05

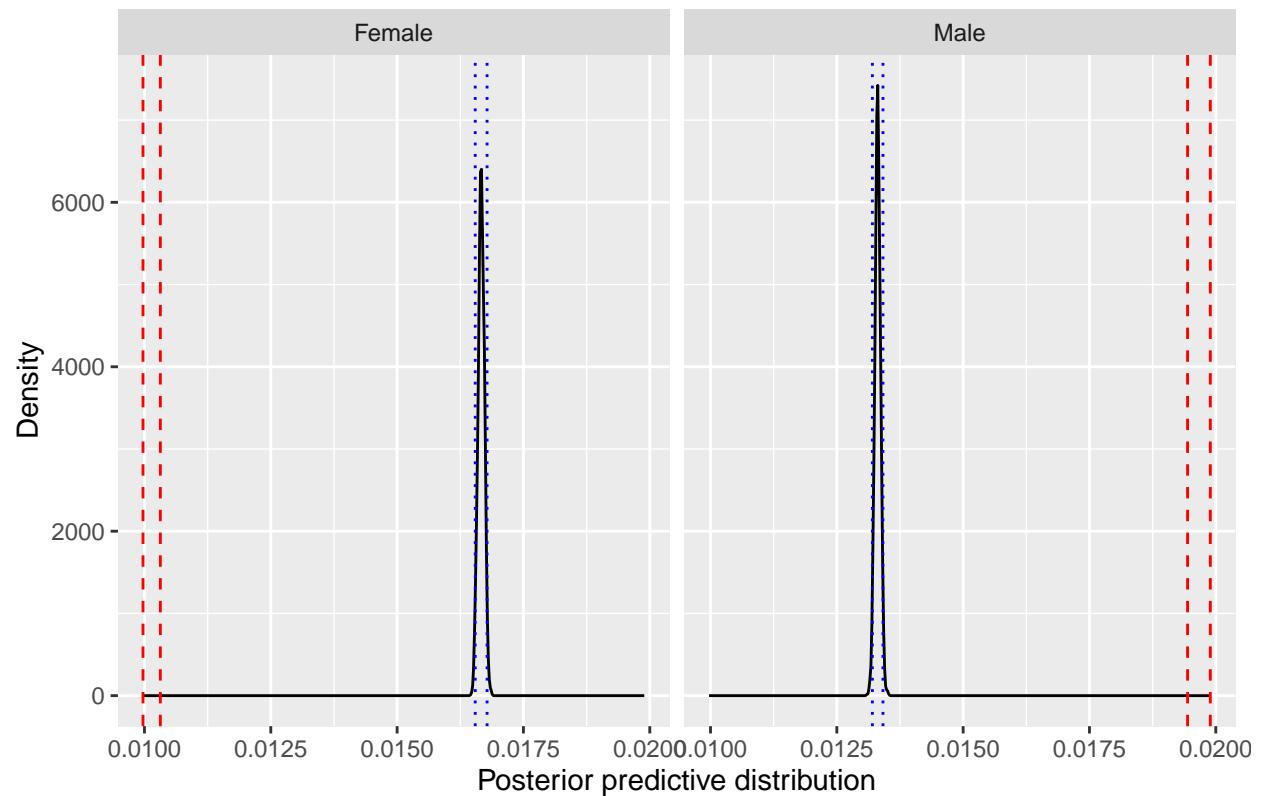


Figure 60: Posterior predictive distribution for ADHD with a random effect on sex, and with age- and sex-adjusted global prevalence prior.

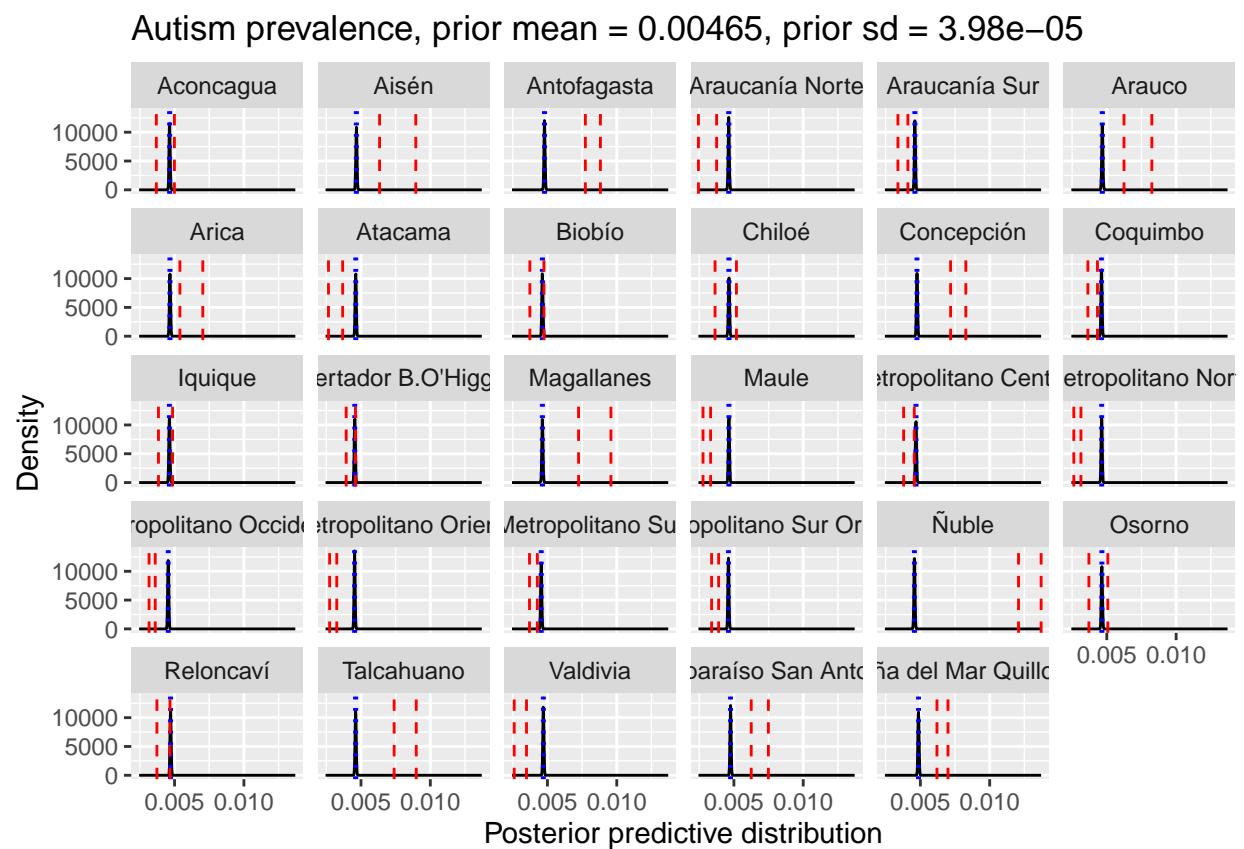


Figure 61: Posterior predictive distribution for autism with a random effect on student's health service, and with age- and sex-adjusted global prevalence prior.

ADHD prevalence, prior mean = 0.015, prior sd = 7.25e-05

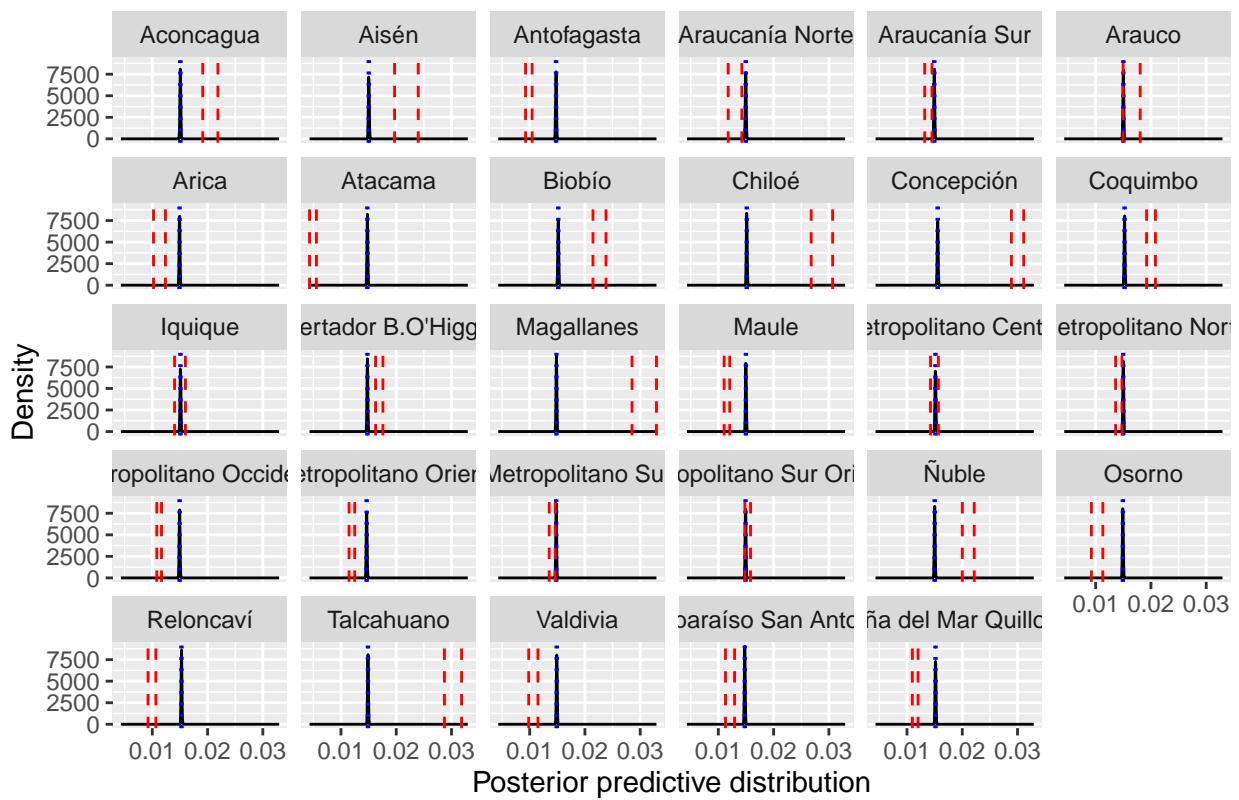


Figure 62: Posterior predictive distribution for ADHD with a random effect on health service, and with age- and sex-adjusted global prevalence prior.

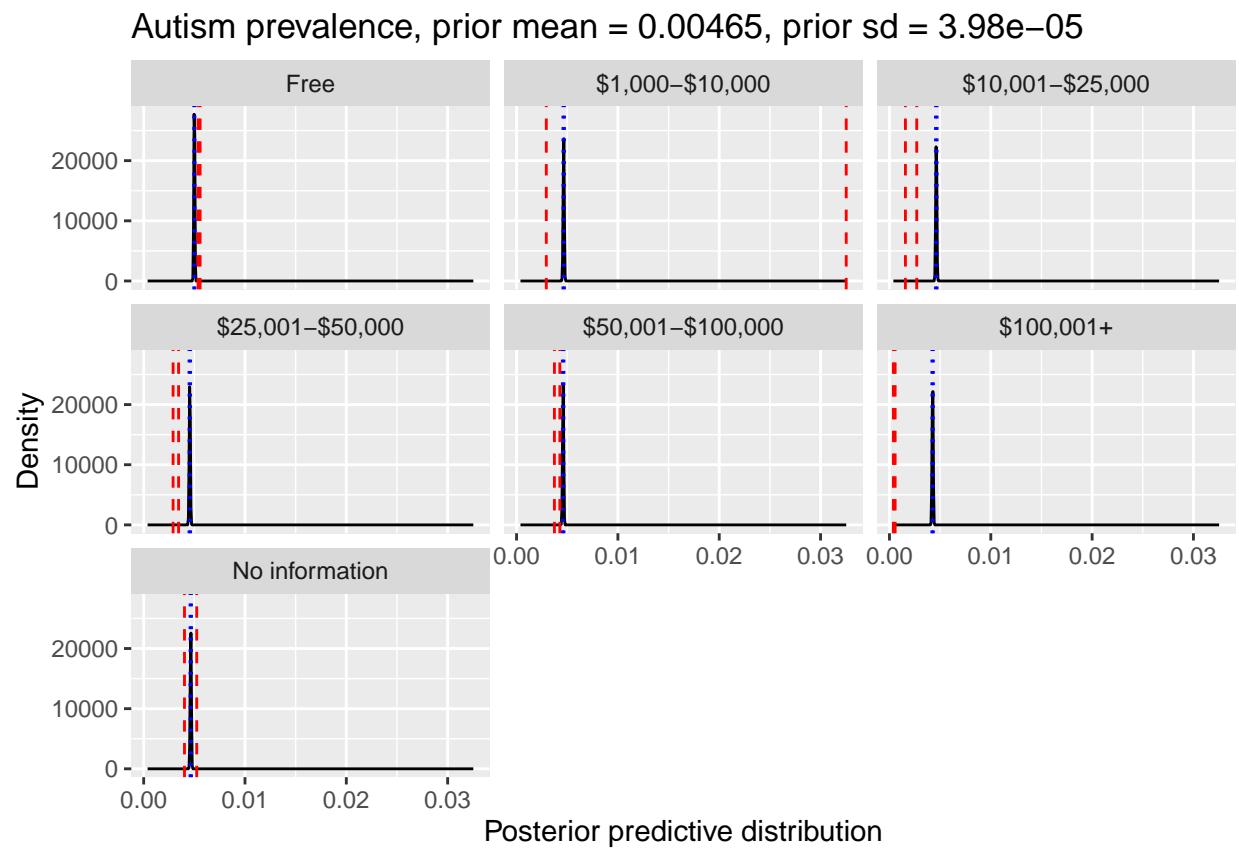


Figure 63: Posterior predictive distribution for autism with a random effect on socio-economic status of student's family, and with age- and sex-adjusted global prevalence prior.

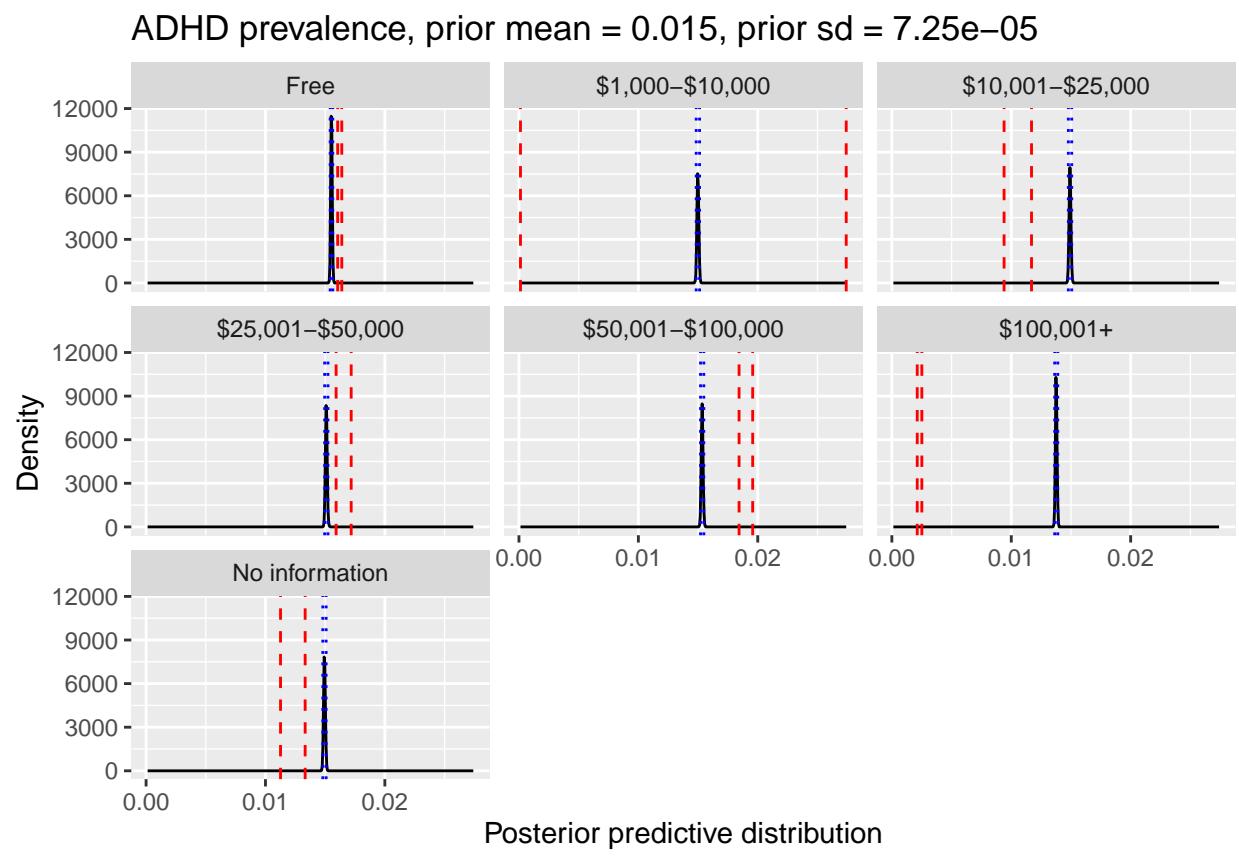


Figure 64: Posterior predictive distribution for ADHD with a random effect on socio-economic status of student's family, and with age- and sex-adjusted global prevalence prior.

Autism prevalence, prior mean = 0.00465, prior sd = 3.98e-05

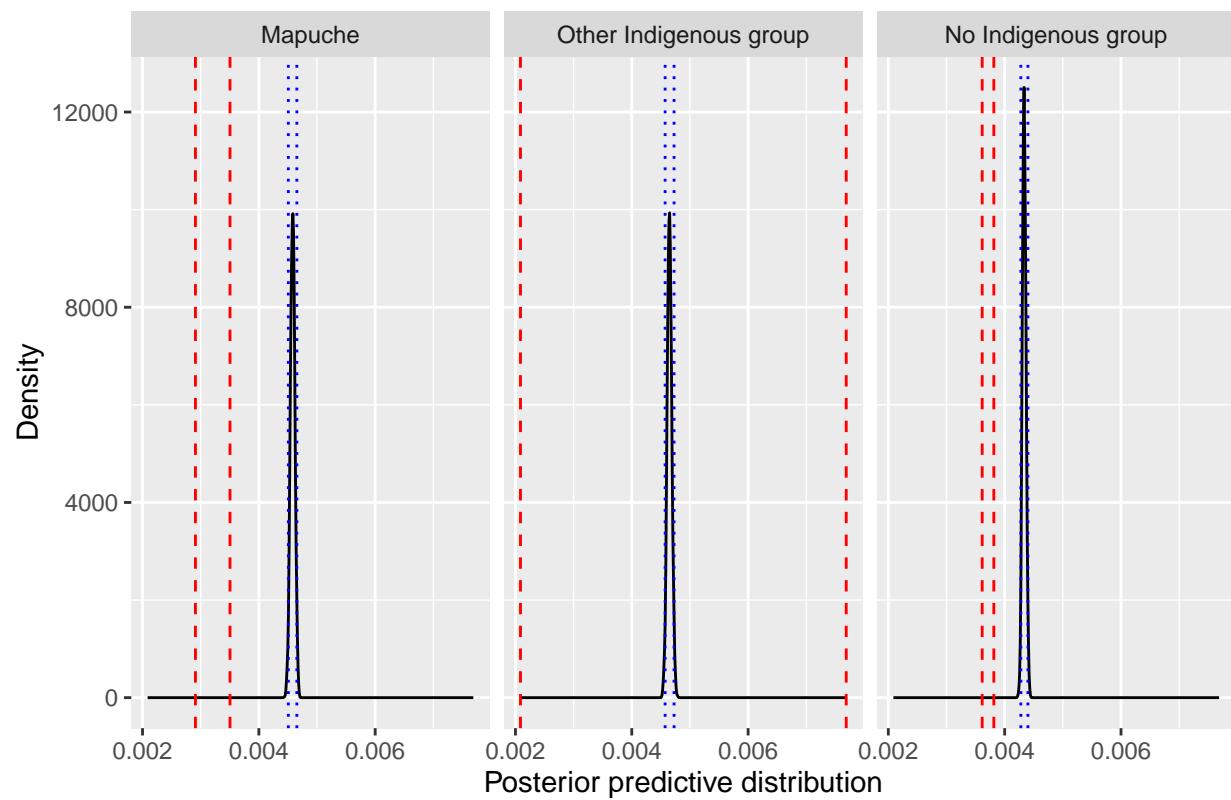


Figure 65: Posterior predictive distribution for autism with a random effect on ethnicity, and with age- and sex-adjusted global prevalence prior.

ADHD prevalence, prior mean = 0.015, prior sd = 7.25e-05

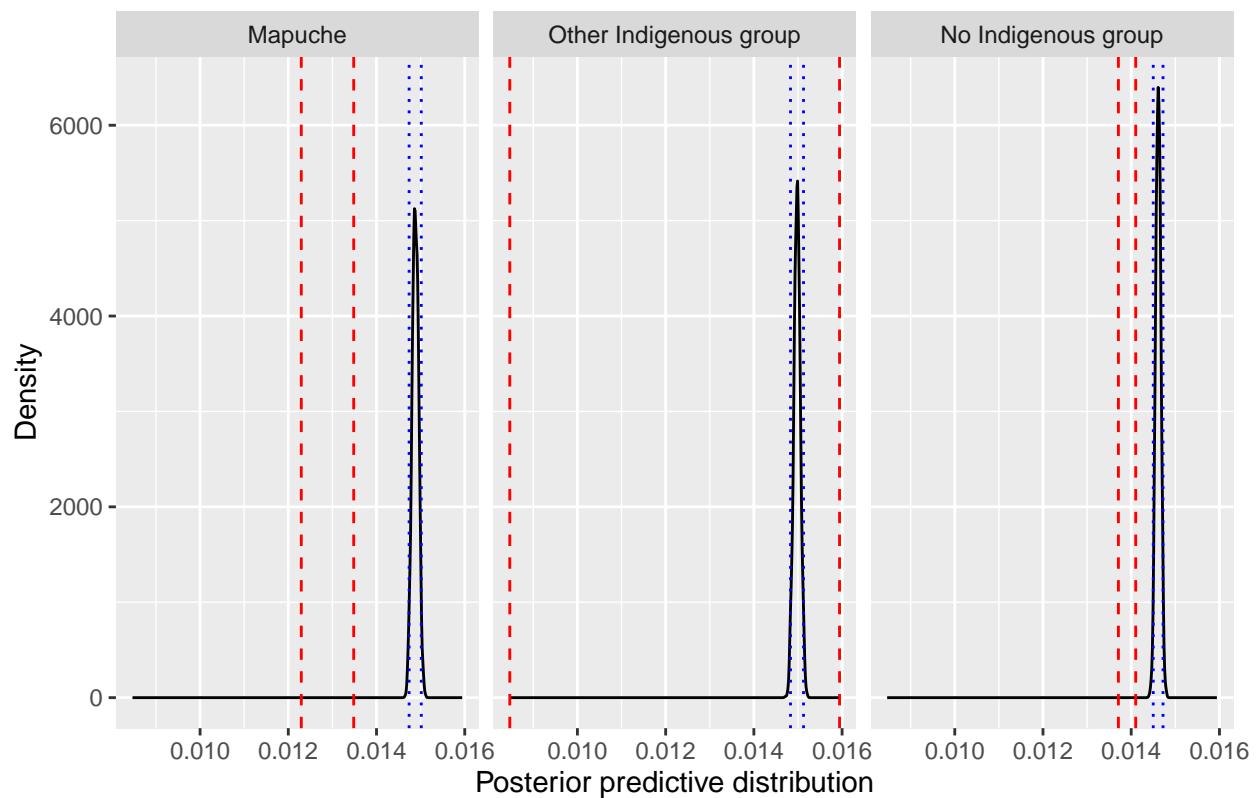


Figure 66: Posterior predictive distribution for ADHD with a random effect on ethnicity, and with age- and sex-adjusted global prevalence prior.

Autism prevalence, prior mean = 0.00465, prior sd = 3.98e-05

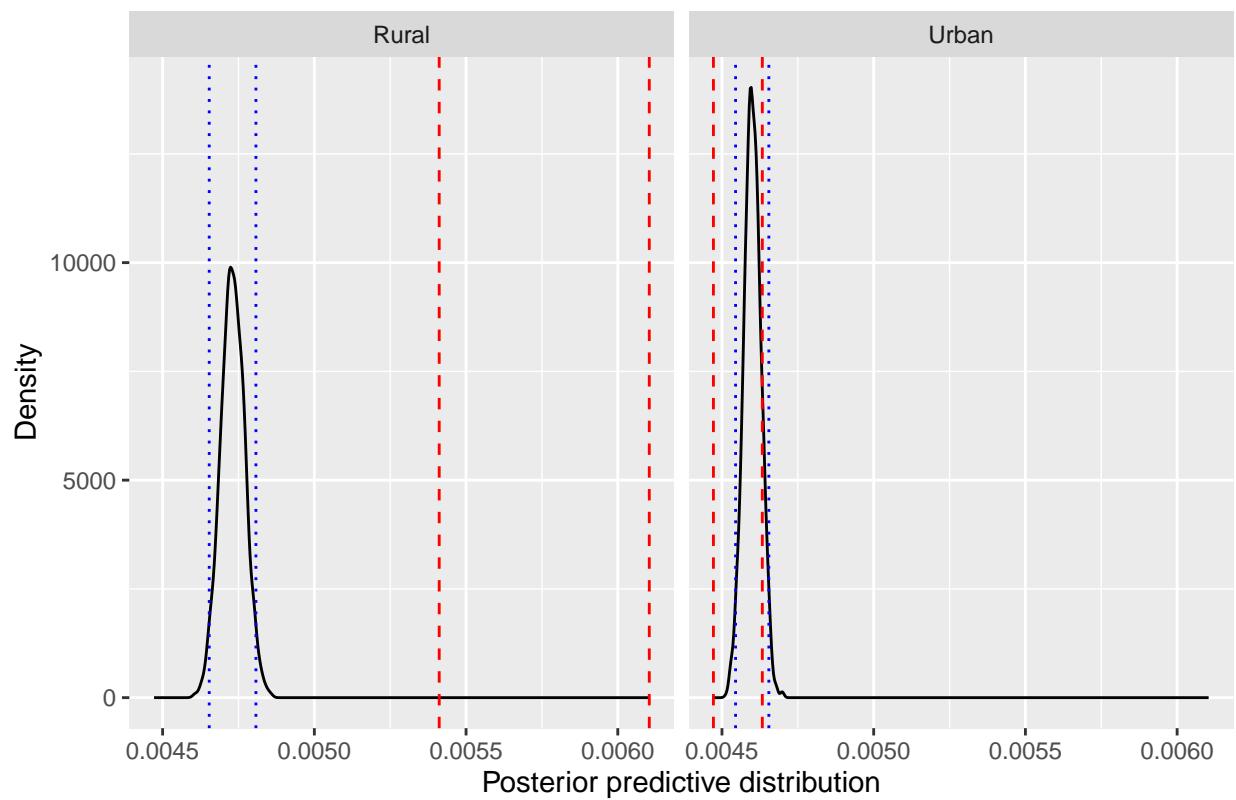


Figure 67: Posterior predictive distribution for autism with a random effect on school's rurality, and with age- and sex-adjusted global prevalence prior.

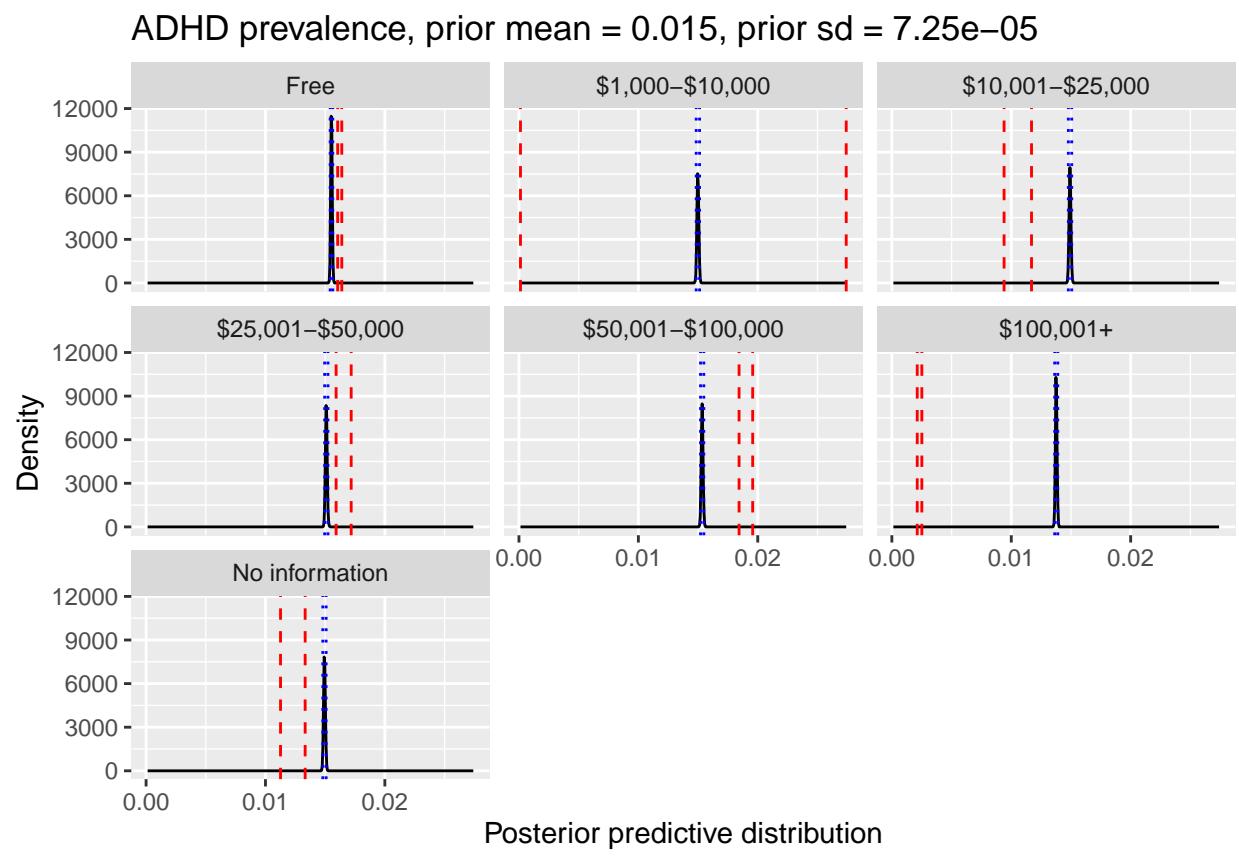


Figure 68: Posterior predictive distribution for ADHD with a random effect on school's rurality, and with age- and sex-adjusted global prevalence prior.