

Supplementary Table S1: Child and family health, education, social and economic changes during the COVID-19 pandemic

Measure	Number of complete responses	Responses n=497
Child		
Health		
Global physical health - n (%)	490	
Excellent		221 (45.1)
Very good		214 (43.7)
Good		47 (9.6)
Fair		5 (1.0)
Poor		3 (0.6)
Global mental/emotional health prior to pandemic - n (%)	490	
Excellent		189 (38.6)
Very good		221 (45.1)
Good		66 (13.5)
Fair		12 (2.5)
Poor		2 (0.4)
COVID-19 infection – n (%)	490	0 (0)
Education	471	
Not in formal care/education		54 (11.5)
Childcare, family day care, pre-school		102 (22.0)
4-year old kindergarten program		46 (10.0)
Primary school		222 (47.0)
High school		46 (10.0)
Vocational		1 (0.5)
School type	269	
Mainstream		186 (69.0)
Mainstream school with HL special unit		46 (17.0)
School for children with HL		10 (4.0)
Special school for children with disabilities		23 (8.5)
Other		4 (1.5)
Preschool type	148	
Mainstream program		124 (84.0)
Mainstream with special program		7 (4.5)
Setting for children with HL		13 (9.0)
Other		4 (2.5)
Education changes/impacts (pre-schooler's)		
Preschool learning arrangements have changed, n (%)	148	
No, continues to attend childcare/kinder		60 (40.5)
No, continues to stay at home		12 (8.1)
Yes, was at childcare/kinder, is now at home		31 (21.0)
Yes, was at home, has returned to childcare/kinder		45 (30.4)
How often has looking after your child made it difficult to do paid work/domestic duties (pre-schooler's)?	88	
Almost never		7 (8.0)
Rarely		6 (6.8)
Sometimes		36 (40.9)
Often		26 (30.0)
Almost always		13 (14.8)

How often have you felt stressed or overwhelmed looking after your child at home while doing paid work/domestic duties (pre-schooler's)? Almost never Rarely Sometimes Often Almost always	88	4 (4.6) 11 (12.5) 42 (47.7) 24 (27.3) 7 (8.0)
Education changes/impacts (primary/secondary school) Child's primary or secondary school learning arrangements have changed No, has continued to attend their primary or secondary school No, continues to learn at home Yes, is now learning at home Yes, was learning at home but has now returned to school	269	12 (4.5) 41 (15.2) 77 (28.6) 139 (51.7)
Usual classes are session	151	128 (84.8)
Child doing remote learning while being supervised at school	151	26 (17.2)
Classes being conducted remotely	118	99 (83.9)
There are assignments for child to complete	118	111 (94.1)
Child has easy access to the internet and a computer/device	118	117 (99.1)
Child has contact with their teacher by phone/video	118	91 (77.1)
Child has contact with classmates by phone/video	118	91 (77.1)
Child education impacts		
How much did/does your child enjoy and engage with his/her learning from home activities? Almost never Rarely Sometimes Often Almost always	286	9 (3.2) 38 (13.3) 101 (35.3) 86 (30.1) 52 (18.2)
Has it been difficult for your child to participate in learning from home because of his/her hearing loss? Almost never Rarely Sometimes Often Almost always	286	108 (37.8) 55 (19.2) 86 (30.1) 22 (7.7) 15 (5.2)
Child social changes		
Number of non-household contacts child had in-person conversation with in last 2 weeks, mean (SD) [Range]	449	7.9 (8.2) [0-40]
How much time has your child spent going outside of the home (e.g., shopping, exercise, appointments, school etc.)? Not at all 1-2 days per week A few days per week Several days per week Every day Several times a day	449	61 (13.6) 115 (25.6) 72 (16.0) 90 (20.0) 102 (22.7) 9 (2.0)

How stressful have the restrictions on leaving home been for your child? Not at all Slightly Moderately Very Extremely	449	141 (31.4) 144 (32.1) 103 (22.9) 41 (9.1) 20 (4.5)
Have your child's contacts with people outside of your home changed relative to before the Coronavirus/COVID-19 pandemic? A lot less A little less About the same A little more A lot more	449	182 (40.5) 64 (14.3) 53 (11.8) 57 (12.7) 93 (20.7)
How much difficulty has your child had following the recommendations for keeping away from close contact with people? None A little Moderate A lot A great amount	449	103 (22.9) 143 (31.9) 99 (22.1) 63 (14.0) 41 (9.1)
Has the quality of the relationship between you and your child changed? A lot worse A little worse About the same A little better A lot better	448	5 (1.1) 51 (11.4) 280 (62.5) 77 (17.2) 35 (7.8)
How stressful have these changes in family relationships been for your child? Not at all Slightly Moderately Very Extremely	448	221 (49.3) 128 (28.6) 55 (12.3) 28 (6.3) 16 (3.6)
Has the quality of your child's relationships with his/her friends or extended family changed? A lot worse A little worse About the same A little better A lot better	448	27 (6.0) 133 (29.7) 270 (60.3) 10 (2.2) 8 (1.8)
How stressful have these changes in social relationships been for your child? Not at all Slightly Moderately Very Extremely	448	162 (36.2) 161 (35.9) 76 (17.0) 38 (8.5) 11 (2.5)

How much has cancellation of important events (such as birthdays, holidays etc.) in your child's life been difficult for him/her? Not at all Slightly Moderately Very Extremely	448	113 (25.2) 151 (33.7) 102 (22.8) 60 (13.4) 22 (4.9)
To what degree is your child concerned about the stability of your living situation? Not at all Slightly Moderately Very Extremely	257	188 (73.2) 39 (15.2) 21 (8.2) 6 (2.3) 3 (1.2)
Did your child worry whether your food would run out because of a lack of money? Yes No	257	17 (6.6) 240 (93.4)
How hopeful is your child that the COVID-19 pandemic, and the resulting changes to daily life will end soon? Not at all Slightly Moderately Very Extremely	257	25 (9.7) 34 (13.2) 71 (27.6) 89 (34.6) 38 (14.8)
Child worries/changes in last 2 weeks (primary/high school)		
Child worried about becoming infected Not at all Slightly Moderately Very Extremely	296	177 (59.8) 87 (29.4) 24 (8.1) 8 (2.7) 0 (0)
Child worried about friends or family being infected Not at all Slightly Moderately Very Extremely	296	173 (58.5) 86 (29.1) 25 (8.5) 11 (3.7) 1 (0.3)
Child worried about their physical health being influenced by Coronavirus/COVID-19? Not at all Slightly Moderately Very Extremely	296	217 (73.3) 53 (17.9) 18 (6.1) 8 (2.7) 0 (0)
Child worried about their Mental/Emotional health being influenced by Coronavirus/COVID-19? Not at all Slightly Moderately Very Extremely	296	190 (64.2) 69 (23.3) 29 (9.8) 5 (1.7) 3 (1.0)

How much is your child asking questions, reading, or talking about Coronavirus/COVID-19? Never Rarely Occasionally Often Most of the time	296	42 (14.2) 79 (26.7) 120 (40.5) 48 (16.2) 7 (2.4)
Has the COVID-19 pandemic, and the resulting changes to daily life led to any positive changes in your child's life? None Only a few Some	443	125 (28.2) 176 (39.7) 142 (32.1)
Parent/family		
Affected by bushfires in 2019/2020 summer Yes No, but extended family were No		6 (1.0) 22 (5.0) 414 (94.0)
Parent COVID-19 infection suspected No Yes, waiting for test result Yes, a positive test result Yes, a negative test result Rather not say	490	442 (90.2%) 1 (0.2%) 1 (0.2%) 44 (9%) 2 (0.4%)
Global physical health - mean (SD) Excellent Very good Good Fair Poor	316	89 (28.2) 134 (42.2) 80 (25.3) 12 (3.8) 1 (0.3)
Number of people currently living in home - mean (SD)	442	4.3 (1.1)
Parent difficulties		
Tending to child's learning at home made it difficult to do paid work and/or domestic duties Almost never Rarely Sometimes Often Almost always	257	32 (12.5) 17 (6.6) 64 (24.9) 68 (26.5) 76 (29.6)
How often did you feel stressed or overwhelmed tending to your child's learning at home while doing paid work/domestic duties? Almost never Rarely Sometimes Often Almost always	257	25 (9.7) 23 (9.0) 83 (32.3) 74 (28.8) 52 (20.2)
Social changes		
Number of non-household contacts had in-person conversation with in last 2 weeks - mean (SD) [Range]	438	11.2 (16.3) [0-200]

Time spent going outside of the home (e.g., shopping, exercise, appointments, work, school etc.) Not at all 1-2 days per week A few days per week Several days per week Every day Several times a day	440	17 (3.9) 137 (31.1) 90 (20.5) 82 (18.6) 107 (24.3) 7 (1.6)
How stressful have the restrictions on leaving home been? Not at all Slightly Moderately Very Extremely	440	71 (16.1) 180 (40.9) 107 (24.3) 62 (14.1) 20 (4.6)
Have your contacts with people outside of your home changed relative to before the Coronavirus/COVID-19 pandemic? A lot less A little less About the same A little more A lot more	439	167 (38.0) 83 (18.9) 66 (15.0) 50 (11.4) 73 (16.6)
How much difficulty have you had following the recommendations for keeping away from close contact with people? None A little Moderate A lot A great amount	439	156 (35.5) 167 (38.0) 64 (14.6) 44 (10.0) 8 (1.8)
Has the quality of the relationship between you and your partner changed? A lot worse A little worse About the same A little better A lot better	439	14 (3.2) 60 (13.7) 285 (64.9) 59 (13.4) 21 (4.8)
How stressful have these changes in your relationship been for you? Not at all Slightly Moderately Very Extremely	439	230 (52.4) 114 (26.0) 64 (14.6) 19 (14.3) 12 (2.7)
Has the quality of the relationship between you and your children changed? A lot worse A little worse About the same A little better A lot better	439	7 (1.6) 50 (11.4) 238 (54.2) 114 (26.0) 30 (6.8)

How stressful have these changes in family relationships been for you? Not at all Slightly Moderately Very Extremely	439	211 (48.1) 128 (29.2) 67 (15.3) 23 (5.2) 10 (2.3)
Has the quality of your relationships with friends or extended family changed? A lot worse A little worse About the same A little better A lot better	439	12 (2.7) 119 (27.1) 283 (64.5) 19 (4.3) 6 (1.4)
How stressful have these changes in social contacts been for you? Not at all Slightly Moderately Very Extremely	439	153 (34.9) 150 (34.2) 93 (23.2) 36 (8.2) 7 (1.6)
Positive social changes		
How much has the COVID-19 pandemic, and the resulting changes to daily life, led to positive changes in your family and your community? Not at all Very little Somewhat Quite a lot Very much	439	50 (11.4) 123 (28.0) 192 (43.7) 63 (14.4) 11 (2.5)
Why? More quality time with family Less busy People looking out for each other Greater community outreach Environment less polluted Other	497	237 (47.7) 152 (30.6) 110 (22.1) 52 (10.5) 133 (26.8) 26 (5.2)
How hopeful are you that the COVID-19 pandemic, and the resulting changes to daily life, will end soon? Not at all Slightly Moderately Very Extremely	439	35 (8.0) 97 (22.1) 150 (34.2) 100 (22.8) 57 (13.0)
Changes to work and family finances		

Are you currently working or studying? (select all that apply)	497	
Working for pay		216 (43.5)
On leave		27 (5.4)
Working usual hours		118 (23.7)
Working reduced hours during the COVID-19 pandemic		49 (9.9)
Stood down from work during the COVID-19 pandemic		19 (3.8)
Lost job during the COVID-19 pandemic		9 (1.8)
Unemployed and looking for a job		14 (2.8)
Retired		0 (0)
Staying at home / homemaker		121 (24.4)
Disabled		1 (0.2)
Enrolled in school/college/university		32 (6.4)
Where are you working? (Select all that apply)	247	
Still going to my workplace		112 (45.3)
Working from home		135 (54.7)
Is your partner currently working or studying? (select all that apply)	497	
Working for pay		233 (46.9)
On leave		3 (0.6)
Working usual hours		160 (32.2)
Working reduced hours during the COVID-19 pandemic		58 (11.7)
Stood down from work during the COVID-19 pandemic		16 (3.2)
Lost job during the COVID-19 pandemic		11 (2.2)
Unemployed and looking for a job		11 (2.2)
Retired		1 (0.2)
Staying at home / homemaker		10 (2.0)
Disabled		3 (0.6)
Enrolled in school/college/university		4 (0.8)
Where is your partner working? (Select all that apply)	260	
Still going to their workplace		159 (61.2)
Working from home		101 (38.8)
Financial difficulties (past 2 weeks)		
To what degree have changes related to the Coronavirus/COVID-19 pandemic created financial problems for you or your family?	438	
Not at all		217 (49.5)
Slightly		118 (26.9)
Moderately		59 (13.5)
Very		29 (6.6)
Extremely		15 (3.4)
Which one of the following best describes your financial situation at this point in the pandemic?	437	
Living comfortably		124 (28.4)
Doing alright		207 (47.4)
Just getting by		77 (17.6)
Finding it quite difficult		19 (4.3)
Finding it very difficult		10 (2.3)
Have you had difficulties paying: (select all that apply)?	497	
Mortgage or rent or other loan re-payments		61 (12.3)
Household bills (utilities/phone/internet)		67 (13.5)
Food		29 (5.8)
Healthcare/Prescription medications		17 (3.4)
Home, car or other insurance		41 (8.3)
No difficulties		338 (68.0)
Difficulties paying one or more bills	497	438 (88.1)

Number of bills with difficulty paying	497	
0		59 (11.9)
1		374 (75.3)
2		33 (6.6)
3		17 (3.4)
4		8 (1.6)
5		6 (1.2)
To what degree are you concerned about the stability of your housing situation?	437	
Not at all		253 (57.9)
Slightly		125 (28.6)
Moderately		31 (7.1)
Very		20 (4.6)
Extremely		8 (1.8)
How often have you felt focused and productive in your work and/or domestic duties?	436	
Almost never		22 (5.1)
Rarely		48 (11.0)
Sometimes		150 (34.4)
Often		158 (36.2)
Almost always		58 (13.3)

All values are presented as the number (n) and percent of respondents (%) who selected each response for categorical variables.

Supplementary Table S2: Daily activities prior to and during the COVID-19 pandemic

Measure	n	Prior to pandemic	During pandemic	p*
Sleep				
Hours slept (weekdays) Less than 6 hours 6-8 hours 8-10 hours 10-12 hours 12+ hours	476	2 (0.5%) 42 (9.0%) 193 (40.5%) 234 (49%) 5 (1%)	2 (0.0%) 38 (8.5%) 198 (44.5%) 200 (45.0%) 12 (2.5%)	0.23
Hours slept (weekends) Less than 6 hours 6-8 hours 8-10 hours 10-12 hours 12+ hours	476	3 (0.5%) 31 (6.5%) 195 (41%) 239 (50%) 8 (2%)	3 (0.5%) 26 (6.0%) 194 (44.0%) 208 (47.0%) 12 (2.5%)	0.12
Bedtime (weekdays) Before 8pm 8pm-10pm 10pm-12am After midnight	476	203 (43%) 247 (52%) 25 (5%) 1 (0%)	142 (32%) 258 (58%) 37 (8%) 6 (2%)	<0.0001
Bedtime (weekends) Before 8pm 8pm-10pm 10pm-12am After midnight	476	136 (28%) 271 (57%) 60 (13%) 9 (2%)	114 (26%) 241 (54%) 76 (17%) 12 (3%)	<0.0001
Exercise				
Days of exercise (per week) None 1-2 days 3-4 days 5-6 days Daily	475	62 (13%) 73 (15%) 128 (27%) 73 (15%) 139 (29%)	64 (14.5%) 124 (28%) 94 (21%) 62 (14%) 99 (22.5%)	<0.0001
Days with time spent outside (per week) None 1-2 days 3-4 days 5-6 days Daily	476	14 (3%) 51 (11%) 83 (17%) 101 (21%) 227 (48%)	23 (5%) 91 (20.5%) 97 (22%) 78 (17.5%) 154 (35%)	<0.0001
Screen time				
TV/digital media use (including Netflix, YouTube, web surfing) None Under 1 hour 1-3 hours 4-6 hours 6 or more hours	473	26 (5.5%) 148 (31.5%) 267 (56.5%) 25 (5.5%) 7 (1.5%)	16 (3.5%) 75 (17%) 239 (54%) 84 (19%) 29 (6.5%)	<0.0001

Social media use (including Facetime, Facebook, Instagram, Snapchat, Twitter, TikTok etc.)				
None				
Under 1 hour	473	379 (80%)	344 (77.5%)	0.0001
1-3 hours		43 (9%)	38 (8.5%)	
4-6 hours		46 (9.5%)	42 (9.5%)	
6 or more hours		4 (1%)	11 (2.5%)	
		1 (0.5%)	8 (2%)	
Video games				
None		301 (64%)	253 (57%)	
Under 1 hour	473	89 (19%)	76 (17%)	<0.0001
1-3 hours		74 (15.5%)	84 (19%)	
4-6 hours		6 (1%)	22 (5%)	
6 or more hours		3 (0.5%)	8 (2%)	

All values are presented as the number (n) and percent of respondents (%) who selected each response for categorical variables. A Stuart Maxwell test was used to test whether distributions are the same for categorical variables.

Supplementary Table S3: Mean child and parent socio-emotional wellbeing scores by degree and laterality of child hearing loss

Mean wellbeing score*	Pre-pandemic			During pandemic		Difference between pre and during pandemic		
	n	Mean	95% CI	Mean	95% CI	Mean difference	95% CI	p
Child								
Mild	101	0.83	0.70 to 0.96	1.21	1.06 to 1.37	0.38	0.25 to 0.52	<0.01
Moderate	118	0.72	0.61 to 0.82	1.06	0.92 to 1.21	0.35	0.24 to 0.45	<0.01
Severe	69	0.80	0.65 to 0.94	1.04	0.88 to 1.20	0.24	0.12 to 0.37	<0.01
Profound	89	0.74	0.63 to 0.84	1.05	0.88 to 1.21	0.31	0.18 to 0.44	<0.01
ANSD	34	0.58	0.47 to 0.69	0.91	0.67 to 1.16	0.33	0.13 to 0.53	<0.01
Permanent Conductive in. Atresia	29	0.91	0.69 to 1.13	1.37	1.07 to 1.66	0.46	0.18 to 0.73	<0.01
Parent								
Mild	100	1.10	0.98 to 1.22	1.52	1.35 to 1.68	0.42	0.28 to 0.56	<0.01
Moderate	116	1.07	0.96 to 1.18	1.41	1.26 to 1.55	0.34	0.21 to 0.47	<0.01
Severe	69	1.00	0.85 to 1.16	1.29	1.11 to 1.47	0.29	0.13 to 0.44	<0.01
Profound	88	1.02	0.88 to 1.16	1.35	1.19 to 1.51	0.33	0.19 to 0.48	<0.01
ANSD	34	1.12	0.87 to 1.37	1.52	1.19 to 1.85	0.40	0.15 to 0.65	<0.01
Permanent Conductive in. Atresia	29	1.07	0.83 to 1.31	1.75	1.39 to 2.11	0.68	0.42 to 0.94	<0.01
Bilateral hearing loss								
Child								
Mild	78	0.80	0.60 to 0.67	1.24	1.07 to 1.41	0.44	0.28 to 0.60	<0.01
Moderate	88	0.72	0.60 to 0.83	1.07	0.89 to 1.25	0.35	0.22 to 0.48	<0.01
Severe	47	0.78	0.59 to 0.97	1.08	0.86 to 1.29	0.30	0.14 to 0.45	<0.01
Profound	50	0.80	0.65 to 0.94	1.10	0.83 to 1.28	0.26	0.09 to 0.43	<0.01
ANSD	14	0.51	0.36 to 0.65	0.77	0.45 to 1.08	0.26	0.03 to 0.49	0.03
Permanent Conductive in. Atresia	10	0.79	0.41 to 1.16	0.95	0.42 to 1.48	0.16	-0.19 to 0.51	0.31
Parent								
Mild	77	1.10	0.97 to 1.24	1.59	1.42 to 1.77	0.49	0.32 to 0.66	<0.01
Moderate	86	1.04	0.90 to 1.18	1.44	1.26 to 1.62	0.40	0.24 to 0.57	<0.01
Severe	47	1.06	0.85 to 1.26	1.35	1.13 to 1.57	0.30	0.09 to 0.51	<0.01
Profound	49	1.10	0.88 to 1.31	1.42	1.21 to 1.62	0.32	0.12 to 0.52	0.02
ANSD	14	1.01	0.49 to 1.52	1.38	0.82 to 1.93	0.37	0.02 to 0.71	0.03
Permanent Conductive in. Atresia	10	1.04	0.53 to 1.54	1.46	0.83 to 2.09	0.43	-0.04 to 0.89	0.07

Unilateral hearing loss								
Child								
Mild	14	0.92	0.54 to 1.30	1.19	0.67 to 1.70	0.27	-0.08 to 0.62	0.12
Moderate	22	0.74	0.46 to 1.02	1.07	0.76 to 1.39	0.34	0.12 to 0.55	<0.01
Severe	14	0.83	0.59 to 1.12	0.88	0.48 to 1.18	0.04	-0.21 to 0.30	0.71
Profound	37	0.66	0.50 to 0.81	1.04	0.77 to 1.31	0.39	0.19 to 0.58	<0.01
ANSD	19	0.63	0.45 to 0.80	0.93	0.58 to 1.29	0.31	0.01 to 0.61	0.04
Permanent Conductive in. Atresia	19	0.97	0.68 to 1.27	1.59	1.24 to 1.93	0.61	0.23 to 0.99	<0.01
Parent								
Mild	14	1.13	0.72 to 1.53	1.44	0.81 to 2.07	0.31	-0.04 to 0.67	0.08
Moderate	22	1.21	0.98 to 1.44	1.40	1.11 to 1.68	0.19	-0.07 to .45	0.15
Severe	14	0.86	0.55 to 1.16	1.09	0.70 to 1.48	0.23	-0.10 to 0.57	0.16
Profound	37	0.93	0.74 to 1.12	1.31	1.05 to 1.57	0.38	0.15 to 0.60	<0.01
ANSD	19	1.20	0.91 to 1.49	1.55	1.11 to 1.98	0.35	-0.02 to 0.71	0.06
Permanent Conductive in. Atresia	19	1.09	0.79 to 1.38	1.90	1.43 to 2.37	0.82	0.49 to 1.14	<0.01

*Mean wellbeing score is generated using the CRISIS emotions/worries 8-item summary score which includes 8 questions rated on a 5-point Likert scale between 0 and 4, with 0 representing the best outcome (i.e. least sad) and 4 representing the poorest outcome (i.e. most sad). P-values are from a paired t-test comparing the three months before the pandemic (pre pandemic) to the last two weeks (during the pandemic).