

## Appendix A7: Correlation and Cross-tabulation Data

Appendix A7 complements the summary data in Chapter 7 of the IGRP. This appendix presents data which accompany the correlation and cross-tabulation figures and data in Chapter 7.

Data for the following Correlations 7.1–7.7 is set out in table form in Table A7.1 to Table A7.7.

- Correlation 7.1: SIR and Parental Competence
- Correlation 7.2: SIR and Household use of Gaelic
- Correlation 7.3: SIR and % Decrease in Gaelic Speakers
- Correlation 7.4: SIR and Teenager’s Identity Ascription
- Correlation 7.5: Teenager’s Gaelic Vibrancy Score and SIR
- Correlation 7.6: Teenager’s Gaelic Vibrancy Score and Household Use
- Correlation 7.7: Teenager’s Gaelic Vibrancy Score and Parental Fluency

### Summary of Correlations 7.1 to 7.7

Figure	Variable 1	Variable 2	N study districts	r (spearman's)	significance
7.1	Standard Incidence Ratio	Parental competence in Gaelic	22	0.724	p < 0.01
7.2	Standard Incidence Ratio	Household use of Gaelic	25	0.788	p < 0.01
7.3	Standard Incidence Ratio	Percentage Decrease 1981 - 2011	24	-0.788	p < 0.01
7.4	Standard Incidence Ratio	Teenager's identity ascription	22	0.584	p < 0.01
7.5	Teenager's Gaelic Vibrancy Score	Standard Incidence Ratio	22	-0.470	p < 0.05
7.6	Teenager's Gaelic Vibrancy Score	Household use of Gaelic	22	-0.582	p < 0.05
7.7	Teenager's Gaelic Vibrancy Score	Parental competence in Gaelic	22	-0.531	p < 0.05

**Table A7.1: SIR and Parental Competence**

Study district	Standardised Incidence Ratio	% both mother and father fluent in Gaelic
01. West Side of Lewis (central)	1.19	46.7
02. West Side of Lewis (south)	1.12	28.6
03. Uig District	0.97	20.0
04. West Side of Lewis (north)	1.25	100.0
05. Ness	1.22	42.9
06. Tolsta	1.08	11.1
07. Loch a Tuath	1.08	23.8
08. Tong	0.88	23.1
09. Stornoway, Barvas Road suburbs	0.85	4.5
10. Stornoway Town	0.76	4.8
11. Stornoway, Point Road suburbs	0.75	11.1
12. South Point	0.94	14.3
13. North Point	0.83	0.0
14. North Lochs	0.99	20.0
15. South Lochs	1.04	12.5
16. North Harris	1.21	47.6
17. South Harris	1.06	35.7
18. North Uist (north & west)	1.14	75.0
19. North Uist (south & east)	1.12	
20. Benbecula	1.05	14.3
21. South Uist (north)	1.28	25.0
22. South Uist (south)	1.26	28.6
23. Barra and Vatersay	1.21	33.3
24. Skye, Staffin	0.94	
25. Isle of Tiree	0.72	
r (spearman's) = 0.724, p < 0.01		

**Table A7.2: SIR and Household use of Gaelic**

Study district	Standardised Incidence Ratio	% Households where all children and all adults use Gaelic
01. West Side of Lewis (central)	1.19	24.7
02. West Side of Lewis (south)	1.12	29.4
03. Uig District	0.97	16.7
04. West Side of Lewis (north)	1.25	36.0
05. Ness	1.22	31.0
06. Tolsta	1.08	13.0
07. Loch a Tuath	1.08	24.2
08. Tong	0.88	12.2
09. Stornoway, Barvas Road suburbs	0.85	7.0
10. Stornoway Town	0.76	8.6
11. Stornoway, Point Road suburbs	0.75	11.8
12. South Point	0.94	17.0
13. North Point	0.83	11.1
14. North Lochs	0.99	16.7
15. South Lochs	1.04	23.5
16. North Harris	1.21	26.2
17. South Harris	1.06	20.0
18. North Uist (north & west)	1.14	30.3
19. North Uist (south & east)	1.12	16.3
20. Benbecula	1.05	15.5
21. South Uist (north)	1.28	39.2
22. South Uist (south)	1.26	33.3
23. Barra and Vatersay	1.21	28.1
24. Skye, Staffin	0.94	39.0
25. Isle of Tiree	0.72	15.3
r (spearman's) = 0.788, p < 0.01		

(Base= all Households with Adults and Children)

**Table A7.3: SIR and % Decrease in Gaelic Speakers**

Study district	Standardised Incidence Ratio	% Decrease 1981-2011
01. West Side of Lewis (central)	1.19	34.2
02. West Side of Lewis (south)	1.12	34.7
03. Uig District	0.97	41.5
04. West Side of Lewis (north)	1.25	31.2
05. Ness	1.22	32.1
06. Tolsta	1.08	38.1
07. Loch a Tuath	1.08	38.1
08. Tong	0.88	45.0
09. Stornoway, Barvas Road suburbs	0.85	40.0
10. Stornoway Town	0.76	32.3
11. Stornoway, Point Road suburbs	0.75	41.5
12. South Point	0.94	43.8
13. North Point	0.83	46.8
14. North Lochs	0.99	41.8
15. South Lochs	1.04	39.0
16. North Harris	1.21	28.6
17. South Harris	1.06	35.6
18. North Uist (north & west)	1.14	30.5
19. North Uist (south & east)	1.12	29.9
20. Benbecula	1.05	-0.9
21. South Uist (north)	1.28	23.5
22. South Uist (south)	1.26	27.9
23. Barra and Vatersay	1.21	27.8
24. Skye, Staffin	0.94	43.9
25. Isle of Tiree	0.72	48.4
r (spearman's) = -0.788, p < 0.01		

**Table A7.4: SIR and Teenager's Identity Ascription**

Study district	Standardised Incidence Ratio	% of teenagers who identify as a Gael
01. West Side of Lewis (central)	1.19	64.3
02. West Side of Lewis (south)	1.12	71.4
03. Uig District	0.97	10.0
04. West Side of Lewis (north)	1.25	100.0
05. Ness	1.22	45.5
06. Tolsta	1.08	37.5
07. Loch a Tuath	1.08	47.6
08. Tong	0.88	23.1
09. Stornoway, Barvas Road suburbs	0.85	23.8
10. Stornoway Town	0.76	18.2
11. Stornoway, Point Road suburbs	0.75	33.3
12. South Point	0.94	30.8
13. North Point	0.83	0.0
14. North Lochs	0.99	44.4
15. South Lochs	1.04	14.3
16. North Harris	1.21	52.4
17. South Harris	1.06	13.3
18. North Uist (north & west)	1.14	75.0
19. North Uist (south & east)	1.12	
20. Benbecula	1.05	33.3
21. South Uist (north)	1.28	66.7
22. South Uist (south)	1.26	57.1
23. Barra and Vatersay	1.21	6.7
24. Skye, Staffin	0.94	
25. Isle of Tiree	0.72	
r (spearman's) = 0.584, p < 0.01		

**Table A7.5: Gaelic Vibrancy Score and SIR**

Study district	Teenager's Gaelic Vibrancy Score	Standardised Incidence Ratio
01. West Side of Lewis (central)	3.17	1.19
02. West Side of Lewis (south)	3.81	1.12
03. Uig District	5.00	0.97
04. West Side of Lewis (north)	3.23	1.25
05. Ness	3.63	1.22
06. Tolsta	4.40	1.08
07. Loch a Tuath	3.77	1.08
08. Tong	4.43	0.88
09. Stornoway, Barvas Road suburbs	4.59	0.85
10. Stornoway Town	4.79	0.76
11. Stornoway, Point Road suburbs	4.38	0.75
12. South Point	4.38	0.94
13. North Point	4.41	0.83
14. North Lochs	4.42	0.99
15. South Lochs	4.36	1.04
16. North Harris	4.05	1.21
17. South Harris	4.51	1.06
18. North Uist (north & west)	3.54	1.14
19. North Uist (south & east)		1.12
20. Benbecula	4.24	1.05
21. South Uist (north)	4.09	1.28
22. South Uist (south)	4.69	1.26
23. Barra and Vatersay	4.72	1.21
24. Skye, Staffin		0.94
25. Isle of Tiree		0.72
r (spearman's) = -0.470, p < 0.05		

**Table A7.6: Gaelic Vibrancy Score and Household Use**

Study district	Teenager's Gaelic Vibrancy Score	% Households where all children and all adults use Gaelic
01. West Side of Lewis (central)	3.17	24.7
02. West Side of Lewis (south)	3.81	29.4
03. Uig District	5.00	16.7
04. West Side of Lewis (north)	3.23	36.0
05. Ness	3.63	31.0
06. Tolsta	4.40	13.0
07. Loch a Tuath	3.77	24.2
08. Tong	4.43	12.2
09. Stornoway, Barvas Road suburbs	4.59	7.0
10. Stornoway Town	4.79	8.6
11. Stornoway, Point Road suburbs	4.38	11.8
12. South Point	4.38	17.0
13. North Point	4.41	11.1
14. North Lochs	4.42	16.7
15. South Lochs	4.36	23.5
16. North Harris	4.05	26.2
17. South Harris	4.51	20.0
18. North Uist (north & west)	3.54	30.3
19. North Uist (south & east)		16.3
20. Benbecula	4.24	15.5
21. South Uist (north)	4.09	39.2
22. South Uist (south)	4.69	33.3
23. Barra and Vatersay	4.72	28.1
24. Skye, Staffin		
25. Isle of Tiree		
r (spearman's) = -0.582, p < 0.05		

**Table A7.7: Gaelic Vibrancy Score and Parental Fluency**

<b>Study district</b>	<b>Teenager's Gaelic Vibrancy Score</b>	<b>% both mother and father fluent in Gaelic</b>
01. West Side of Lewis (central)	3.17	46.7
02. West Side of Lewis (south)	3.81	28.6
03. Uig District	5.00	20.0
04. West Side of Lewis (north)	3.23	100.0
05. Ness	3.63	42.9
06. Tolsta	4.40	11.1
07. Loch a Tuath	3.77	23.8
08. Tong	4.43	23.1
09. Stornoway, Barvas Road suburbs	4.59	4.5
10. Stornoway Town	4.79	4.8
11. Stornoway, Point Road suburbs	4.38	11.1
12. South Point	4.38	14.3
13. North Point	4.41	0.0
14. North Lochs	4.42	20.0
15. South Lochs	4.36	12.5
16. North Harris	4.05	47.6
17. South Harris	4.51	35.7
18. North Uist (north & west)	3.54	75.0
19. North Uist (south & east)		
20. Benbecula	4.24	14.3
21. South Uist (north)	4.09	25.0
22. South Uist (south)	4.69	28.6
23. Barra and Vatersay	4.72	33.3
24. Skye, Staffin		
25. Isle of Tiree		
r (spearman's) = 0.531, p < 0.05		



Data for the following Cross-tabulations 7.8–7.12 is set out in table form in Table A7.8 to Table A7.12. Data relates to cross-tabulations 1–5 as discussed in Chapter 7, at section 7.2.3.

- Cross-tabulation 7.8: Teenager’s Gaelic vibrancy score and Household use of Gaelic
- Cross-tabulation 7.9: Teenager’s Gaelic vibrancy score and Parental fluency in Gaelic
- Cross-tabulation 7.10: Teenager’s Gaelic vibrancy score and SIR
- Cross-tabulation 7.11: Parental fluency in Gaelic and SIR
- Cross-tabulation 7.12: Household use of Gaelic and SIR

**Summary Data for Cross-tabulations 7.8 to 7.12**

Figure	Categorical variable 1	Categorical variable 2	N study districts	Pearson's chi-square	significance
7.8	Teenager's Gaelic Vibrancy Score (groups: higher and medium-to-low)	Household use of Gaelic (groups: higher and medium-to-low)	22	12.571	p < 0.01
7.9	Teenager's Gaelic Vibrancy Score (groups: higher and medium-to-low)	Parental fluency in Gaelic (groups: higher and medium-to-low)	22	6.044	p < 0.05
7.10	Teenager's Gaelic Vibrancy Score (groups: higher and medium-to-low)	Standard Incidence Ratio (groups: higher and medium-to-low)	22	10.476	p < 0.01
7.11	Parental fluency in Gaelic (groups: higher and medium-to-low)	Standard Incidence Ratio (groups: higher and medium-to-low)	23	11.374	p < 0.01
7.12	Household use of Gaelic (groups: higher and medium-to-low)	Standard Incidence Ratio (groups: higher and medium-to-low)	25	9.077	p < 0.01

N.B. because of the low number of sample points (25) several of the cross-tabulations have an 'expected count of less than 5'

**Table A7.8: Teenager’s Gaelic vibrancy score and Household use of Gaelic**

		Household use of Gaelic	
		Higher	Medium-to-low
Teenager's Gaelic Vibrancy Score	Higher	8	3
	Medium-to-low	0	11

**Table A7.9: Teenager’s Gaelic vibrancy score and Parental fluency in Gaelic**

		Parental fluency in Gaelic	
		Higher	Medium-to-low
Teenager's Gaelic Vibrancy Score	Higher	6	3
	Medium-to-low	2	11

**Table A7.10: Teenager’s Gaelic vibrancy score and SIR**

		Standard Incidence Ratio	
		Higher	Medium-to-low
Teenager's Gaelic Vibrancy Score	Higher	8	0
	Medium-to-low	4	10

**Table A7.11: Parental fluency in Gaelic and SIR**

		Standard Incidence Ratio	
		Higher	Medium-to-low
Parental fluency in Gaelic	Higher	9	0
	Medium-to-low	4	10

**Table A7.12: Household use of Gaelic and SIR**

		Standard Incidence Ratio	
		Higher	Medium-to-low
Household Use of Gaelic	Higher	10	2
	Medium-to-low	3	10