Greetings
Laurie and Winifred Bauer

Question 18a asked about the way children greet their peers:

18 Brackie is a good friend of yours.
(a) What is the first thing you would say to Brackie when you get to school in the morning?

There was a considerable variety of responses to this, including many which did not involve a greeting at all, e.g. *Want to play footy?* We coded only those which were greetings. The teachers had some difficulty in recording what the children said in some cases, and it was not always clear whether two different written forms were attempts to record the same spoken form: is *What's up?* equivalent to *Whas sup*? Although some teachers recorded accompanying body language, not all did, and we thus did not have sufficiently comparable data to make use of the information provided by those who did, although nods, punches on the arm and various other non-verbal greetings were clearly part of the system. In some cases teachers recorded differences in usage between the sexes, but again, the information was too sporadic to be useful. However, from the little information we have, it seems likely that this feature of greetings would be worth investigating.

There were relatively few simplifications possible in this data: few forms could be grouped. The one-occurrence forms (including joke forms like *What's down?*) were eliminated, and many forms with only two or three occurrences scattered across the country were also ignored.

There was a small group of forms which had a very high frequency and were spread throughout the country and through schools of all deciles. These were *Hi* (121); *Hello* (72); *Hey* (usually with some form of address) (60). (The associated address forms were also coded as a separate data set (18aii).)

However, two high frequency forms show definite regional differentiation: *What's up?* (63) and *Gidday* (56). *Gidday* was found only sporadically in the Northern Region, but was much more frequent from Hawkes Bay south, and was particularly common in the South Island. (Note that the figures in the Main Region table below do not add to 100%, because there is one unclassifiable school on the border between the Northern and Central areas.)

On the other hand, *What's up?* is primarily a Northern form, appearing only sporadically in the South Island. The following table shows the distribution of these forms in relation to the Main Regions:

	Northern Region		**Central Region**		**Southern Region**	
	No.	% of total	No.	% of total	No.	% of total
Schools	57	38	78	52	14	9
What's up?	34	54	25	40	3	5
Gidday	8	14	38	68	9	16

The following table shows their distribution in relation to the North Island – South Island division:

	North Island		South Island	
	No.	% of total	No.	% of total
Schools	93	62	57	38
What's up?	48	76	15	24
Gidday	20	35	36	65

Thus although these two greetings are not totally discrete in their distribution, there is a clear regional patterning.
The medium-low frequency terms were: *good morning* (31); *kia ora* (19); *howz it?* (17); *yoh* (16); *morning* (13); *howdy* (11); *how are you doing?* (10), *hi, how are ya* (10).
Good morning was found sporadically from Northland to Southland. However, it was more prevalent in the Central Region, as the following table indicates.

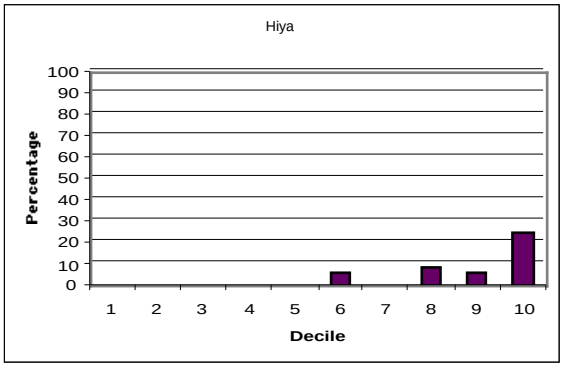
	Northern Region		Central Region		Southern Region	
	No.	% of total	No.	% of total	No.	% of total
Schools	53	35	77	51	14	9
Good morning	8	26	21	67	2	6

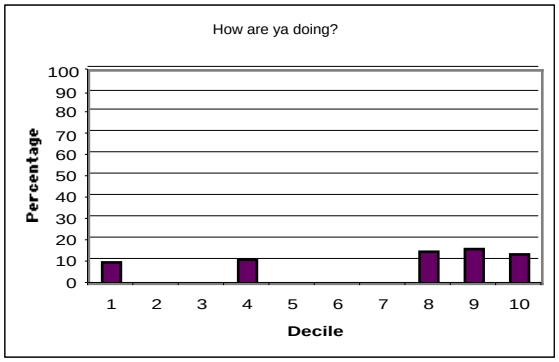
Kia ora was reported from Northland to mid-Canterbury, but rather surprisingly was not reported from the Bay of Plenty. 10 of the 19 occurrences were in the Northern Region, and 8 in the Central Region. It is perhaps surprising that this form is not even more strongly regionalised. There are only three reports from the South Island, so it is clearly regionalised by Island.
Howz it? is a predominantly Northern form as well: 14 of the 17 reports were from the Northern Region (82%). There were no reports of this from the South Island.
Yoh was reported from Northland to mid Canterbury. There does not appear to be any significance in its distribution, although the absence from the Southern Region may be one of many indications of the conservatism of that region.
Morning is reported from Auckland to Southland, but is absent from Northland. It is perhaps a little more common in the Southern Region than elsewhere: 3 reports were in the North (23%); 3 in Hawkes Bay, two in Nelson, and 5 south of Timaru, although this includes two schools which are normally Central rather than Southern in their linguistic behaviour. Thus 7 reports come from the Central region (54%), 3 from the South (23%)).
Howdy was reported from Northland to Timaru. 6 of the 11 reports come from the North, 5 from the Central Region. There is thus a slight tendency for it to be a Northern form.
How are you doing? was dotted from Auckland to Southland, with no apparent patterning.
Hi, how are ya? was found from Northland to Southland, with no patterning evident.
There were also some low frequency terms: *How are you hanging?* (9); *hi ya* (8); nickname without greeting (but almost certainly accompanied by some non-verbal gesture) (8); *cheers* (7); *how are you* (4); *what up* (3); *yohl* (2).
How are you hanging? was reported sporadically from Northland to Southland, *hi ya* from Auckland to Otago, nicknames from Auckland to north Canterbury, *cheers* from Auckland to the Wairarapa (ie not in the South Island), *how are you*

from the central plateau, Wellington, Nelson and Christchurch, *what up?* from Northland and Auckland, and *yohl* from Auckland and the Bay of Plenty. Of these, only the occurrence of *what up?* in the North is likely to be of significance, and that is only because *what's up?* is a Northern form.
There was also a group of terms which appeared to show some signs of social variation, and these were considered from that point of view. They were *What's up?, Hiya, Good morning, Howz it?, How are ya doing?, Kia ora, How's it going?, Morning, Cheers, and What are you up to?*
Because the number of schools in each decile varies between 9 and 21, the raw numbers in themselves do not provide an interpretable picture. In the table below, the percentage of schools in each decile reporting each form are given, as these are more comparable:

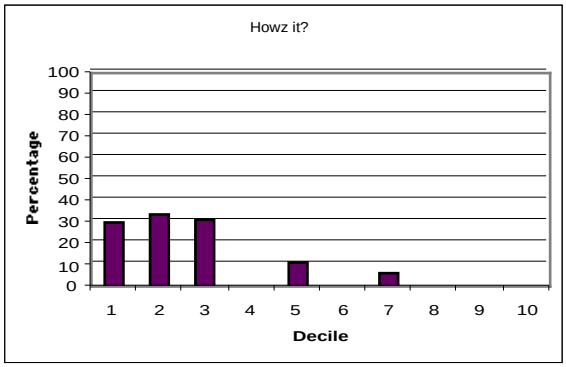
Decile (no. of schools)	What's up?	Hiya	Good morning	Howz it?	How are ya doing?	Kia ora	How's it going?	Morn-ing	Cheers	What are you up to?
1 (10)	50	0	30	30	10	30	0	0	0	10
2 (15)	80	0	47	33	0	40	0	13	0	6
3 (16)	44	0	19	31	0	13	0	17	6	6
4 (9)	22	0	22	0	11	11	11	0	11	0
5 (19)	57	0	11	11	0	11	11	0	11	0
6 (16)	19	6	19	0	0	0	0	13	6	6
7 (15)	53	0	13	6	0	13	0	6	7	0
8 (21)	29	9	14	0	14	0	0	14	4	0
9 (13)	38	7	23	0	16	15	0	23	0	0
10 (16)	25	25	19	0	13	6	6	0	0	0

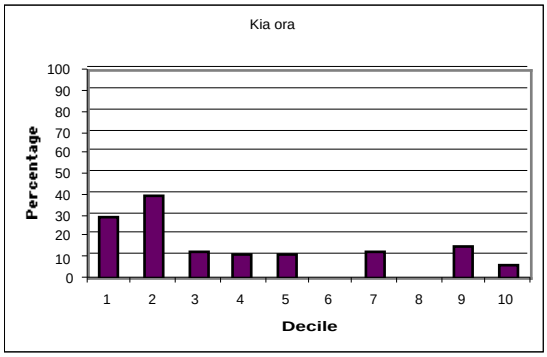
Hiya is clearly a high decile form, and *How are ya doing?* has a similar tendency, although the reports from decile 1 and decile 4 schools make this less clear.

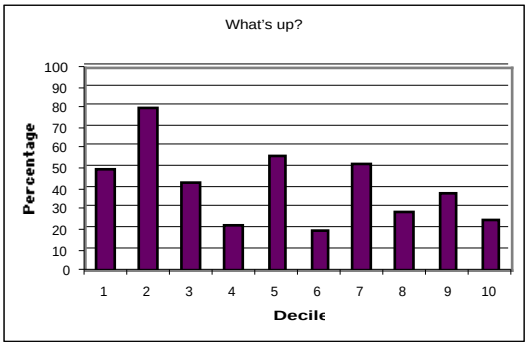


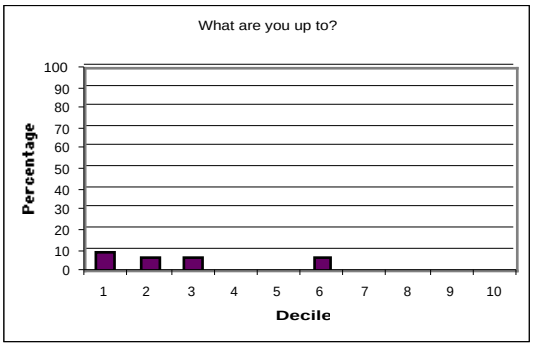


Howz it is clearly a low decile form. *What's up* is also more frequent in the lowest decile schools, as is *Kia ora* and *What are you up to?*

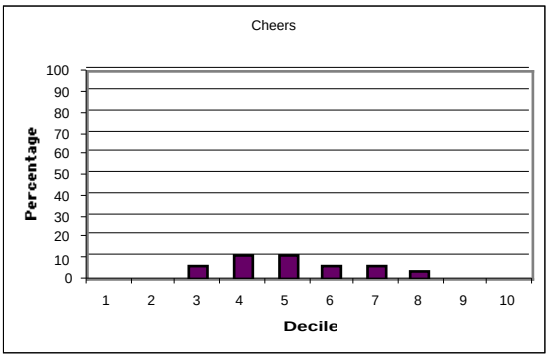








Cheers is a mid-decile form.



Thus greetings show some evidence of social variation within NZ. This interacts with the regional variation shown to create a complex picture.

Statistical Analysis

The forms *cheers, gidday, hi ya, howz it, kia ora* and *what's up* were included in the statistical analysis for this question.

Cheers was significantly more likely in low decile schools (p-value 0.0009). (Note that the statistics program has no way of recognising "middle decile" as a concept, although the graph above suggests that this is the most appropriate way

of characterising the pattern for *cheers*.) In terms of Main Region, *cheers* was too low in frequency for the statistical program to produce results, and there were no occurrences in the Southern Region, which is the basis for the principal contrasts. Even when the Southern Region was deleted, the program could not produce results.

Gidday was significantly high decile (p-value 0.0037). *Gidday* was shown to be significantly less frequent in the Northern Region than the Southern Region (p-value 0.0004), and significantly less common in the Northern Region than the Central Region (0.0001). There was no significant difference between the Central and Southern Regions. G*idday* is also significantly more likely in the South Island than the North (p-value 0.0001). We thus need to investigate the interactions between Decile, Main Region and Island for *gidday*.

Firstly the interaction between Decile and Main Region was investigated. There is still significantly less use of *gidday* in the Northern Region than the Southern Region when Decile is taken into account (p-value 0.0006), and less use of *gidday* in the Northern Region than the Central Region when Decile is taken into account (p-value 0.0002), and the difference between the Central and Southern regions is again not significant. The effect of Decile when Main Region is taken into account is also significant, but to a lesser degree (p-value 0.0263). Because the p-values for both the Northern Region contrasts are a lot lower than that for Decile, we can conclude that the effect of Main Region variation is more important than Decile for this form. Thus the fact that *gidday* is less common in the Northern Region than elsewhere explains to some extent (but not completely) why this form is high decile.

Next, the interaction between Decile and Island was investigated. The p-value for Island when Decile is taken into account is highly significant, 0.0000 derived from a non-zero figure. The p-value for decile when Island is taken into account is only just significant (0.0345). Thus to a considerable extent, the Island distribution accounts for the high decile association of *gidday*.

The interaction between Main Region and Island was also investigated. For *gidday*, there was significant variation by Island (p-value 0.0068) when Main Region was taken into account, but the variation by Main Region when Island was taken into account was not significant. Thus Island is a more important factor than Main Region for this form.

Overall, then, for *gidday*, the most important factor is Island, followed by Main Region and then Decile.

Hi ya was significantly high decile (p-value 0.0043). There was no sign of regionalisation.

Howz it was significantly more likely in low decile schools (p-value 0.0004). *Howz it* was significantly more frequent in the Northern Region than the Southern Region (p-value 0.0001), but because it was completely absent from the Southern Region, it was necessary to eliminate the Southern Region from the data to get a contrast between the Northern and Central Regions. When this was done, it showed that *howz it* is significantly more frequent in the Northern Region than the Central Region (p-value 0.0016). *Howz it* is reported only from the North Island. Again, it is necessary to investigate the interactions between Island, Main Region and Decile.

Firstly, Main Region and Decile are considered. The calculation excluded the Southern Region. For *howz it*, the p-value comparing Northern and Central

Regions when Decile is taken into account is 0.0131, whereas the p-value for Decile when Main Region is taken into account is 0.0022. This indicates that while both these factors have a significant influence on the distribution, the Decile is stronger.

Because *howz it* is reported only from the North Island, the interaction between Decile and Island could not sensibly be investigated. However, the calculation for Decile in the North Island alone shows that Decile is significant (p-value 0.0025), so Decile still has a significant part to play in explaining the distribution of this form.

Thus overall for *howz it*, the most important factor is Island, where the correlation is absolute. However, Decile is also important, and more important than Main Region for this form.

Kia ora was significantly more likely in low decile schools (p-value 0.0156). There were no significant contrasts between any of the three Main Regions in the use of *kia ora.* However, *kia ora* is just significantly more common in the North Island than the South (p-value 0.0436). Thus we need to investigate the interaction between Island and Decile.

When this was done, *kia ora* was shown to have a significant correlation with Decile when Island was taken into account, p-value 0.0185. The p-value for Island was not significant when Decile is taken into account. Thus Decile is more important than Island in accounting for the distribution of *kia ora.*

What's up? was significantly more likely in low decile schools (p-value 0.0100). *What's up* was shown to be significantly more common in the Northern Region than the Southern Region (p-value 0.0165), and significantly more common in the Northern Region than the Central Region (0.0014). However, there was no significant difference between the Central and Southern Regions. *What's up* is also significantly more likely in the North Island than the South (p-value 0.0028). In addition, *what's up* was shown to be significantly more common in urban than in rural schools. The interactions between Decile, Main Region, Island and Urban/Rural thus require investigation.

Firstly, Decile and Main Region were considered. For *what's up*, the p-value comparing the Northern and Southern Regions when Decile is taken into account is significant: 0.0169, and that comparing the Northern and Central Regions is also significant (p-value 0.0076), but that comparing the Central and Southern Regions is again not significant (0.3652). The p-value for Decile when Main Region is taken into account is not significant (0.0715), so we must conclude that Main Region variation (i.e. the prevalence of this form in the Northern Region) is stronger in its effect than the association with Decile.

When the interaction between Decile and Island was investigated, *what's up* was shown to have a just significant correlation with Decile when Island was taken into account, p-value 0.0453. Also, when Decile was taken into account, *what's up* was significantly associated with the North Island (p-value 0.0101). Thus for *what's up*, it is not easy to assess the relative strength of these factors. On the one hand, Decile has a considerable impact on the strength of the Island correlation, but on the other, the Island correlation is slightly stronger.

When the interaction between Decile and Urban/Rural distribution was investigated, the initial calculations indicated that for *what's up*, there were significant differences between the Decile patterning in urban and rural schools. Accordingly, each of these groups was investigated separately.

This showed that in rural schools, *what's up* is significantly associated with low decile, with the p-value 0.0001. In contrast, although there was a tendency for *what's up* to be low decile in urban schools, that tendency was not significant (the p-value is 0.4758). When these differences are ignored, Decile is significant when Urban / Rural variation is taken into account (p-value 0.0014), and the Urban / Rural factor is significant when Decile is taken into account (p-value 0.0028). Thus these two factors are both important, and do not explain each other at all, but rather the reverse.

Next, Main Region and Island were investigated. When Island is taken into account, the Northern – Southern Region contrast is not significant, but the Northern – Central Region contrast remains just significant (p-value 0.0352). When Main Region is taken into account, the p-value for Island is not significant. Thus the Main Region effect is stronger than the Island effect for this form.

Next Main Region and Urban / Rural were investigated. When Urban / Rural distribution is taken into account, both the Northern – Southern contrast and the Northern – Central contrast had significant p-values (0.0210 and 0.0002 respectively). When Main Region is taken into account, the p-value for the urban / rural contrast is also significant (0.0055). Thus both these factors are important in accounting for the distribution of *what's up*, and do not explain each other.

Lastly, the Island and Urban / Rural interaction was investigated. This showed that the p-value for Island variation when the Urban / Rural factor is taken into account is significant (0.0013), and when Island is taken into account, the Urban / Rural factor is also significant (0.0263). The Island value is lower, however, (and a little lower than the Island factor taken alone), and so Island probably has stronger explanatory power than the Urban / rural factor.

Overall, for *what's up*, the most important factor appears to be Main Region (i.e. *what's up* is strongly associated with the Northern Region). However, the Urban / Rural factor is also important, and so is Decile. Island is probably the least important, since it is a poor representation of the association with the Northern Region, and only seems strong in relation to Decile and Urban / Rural because of this.

Summary

Cheers was shown to be significantly a low-decile form, with no other factors having a significant impact on its distribution.

Gidday was shown to be significantly high decile, to be commoner in the Southern Region and the Central Region than the Northern Region, and to be commoner in the South Island than the North, with the factors affecting the distribution of *gidday* ranked Island, Main Region, Decile.

Hiya was shown to be significantly high decile, with no other factors influencing its distribution significantly.

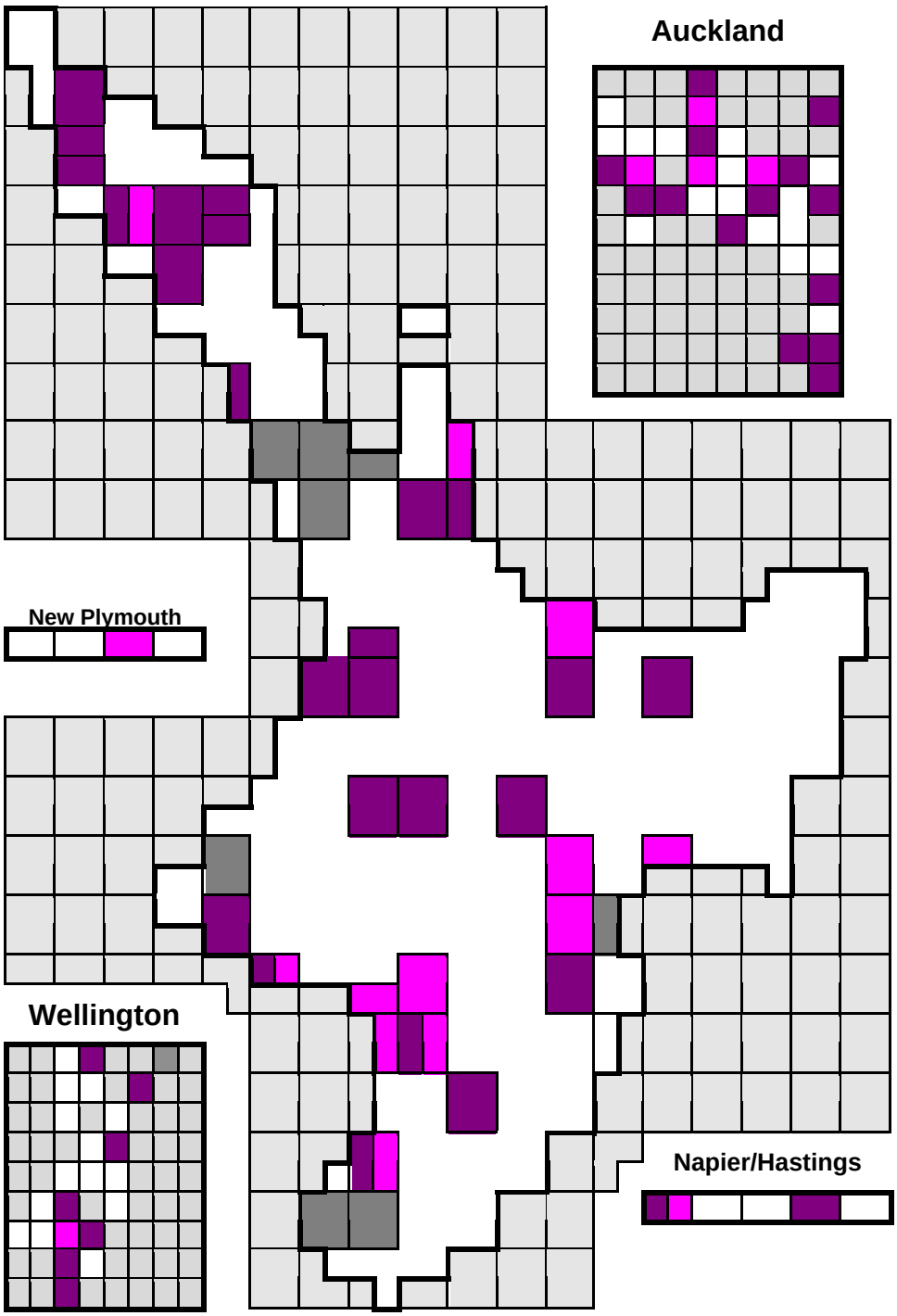
Howzit was shown to be significantly low decile, more common in the Northern Region than in either the Central or Southern Region, and found only in the North Island. The factors affecting this form are probably ranked Island, Decile, Main Region in importance.

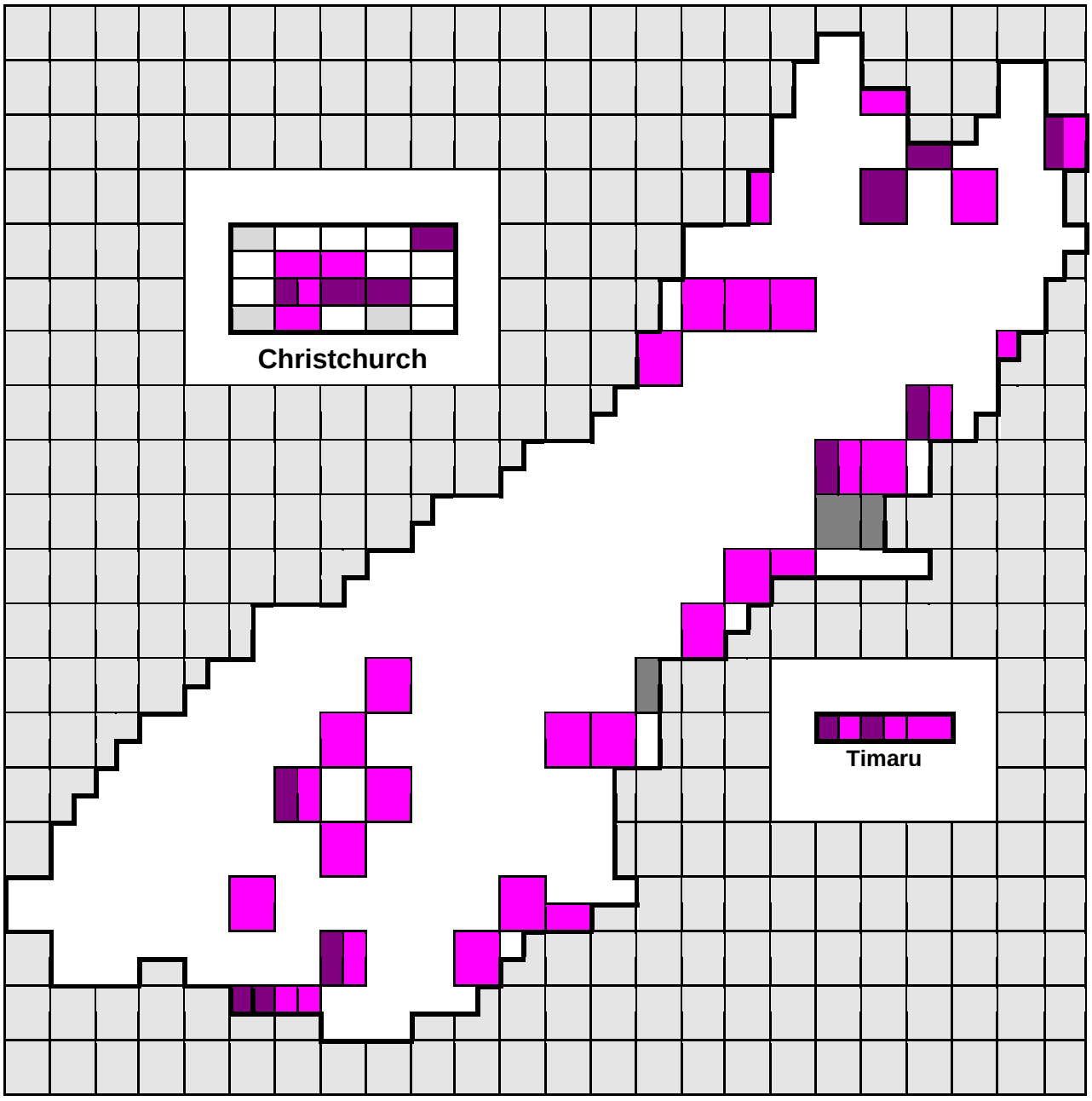
Kia ora was shown to be significantly low decile. It was just significantly a North Island form, but the Decile effect is considerably stronger than the Island effect.

What's up is low decile, commoner in the Northern Region than in either the Central or Southern Region, commoner in the North Island than the South, and

more common in urban than in rural schools. The factors affecting *what's up* are ranked Main Region, Decile, Urban / Rural, Island, although the rank order of the middle two is not clear.
The relevant maps follow.

Map 1: Greetings: *What's up?* and *Gidday*





Key

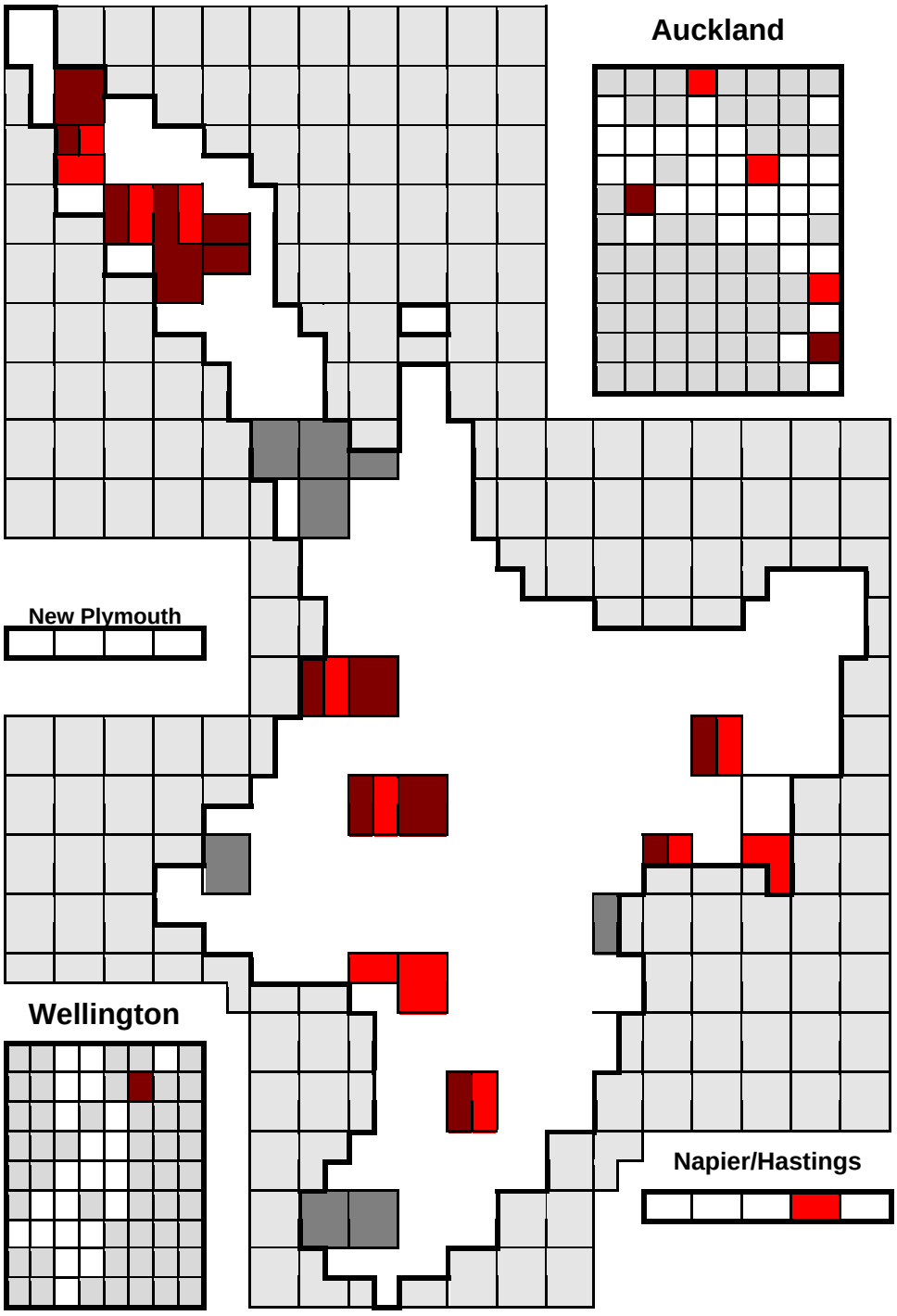
Note that the insets are not to scale, nor all on the same scale for practical reasons. Each box represents one school in both urban and rural areas.

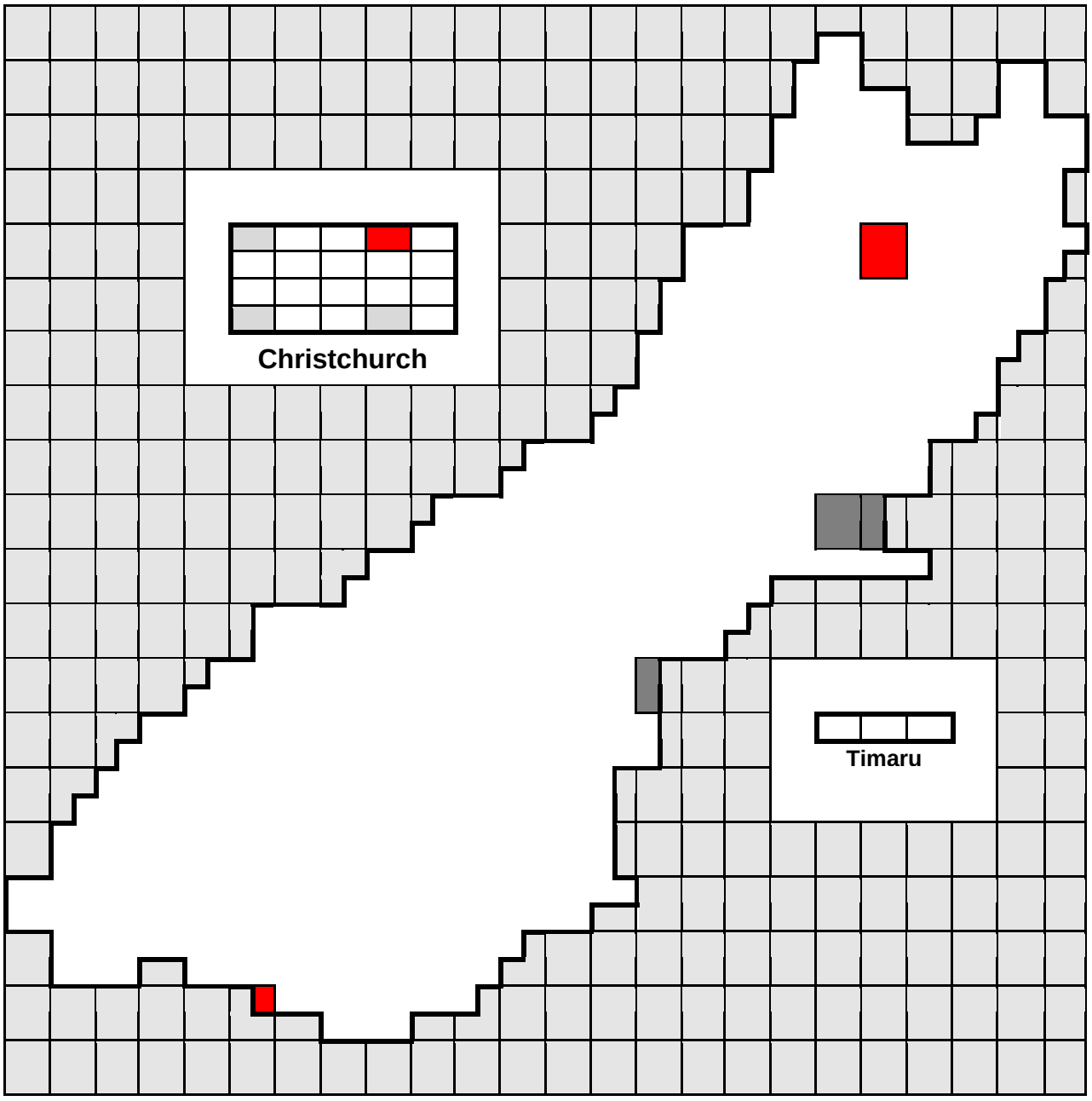
What's up?

See urban map insert

Gidday

Map 2: Further Greetings: *Howz it?* and *Kia ora*





Key

Note that the insets are not to scale, nor all on the same scale for practical reasons. Each box represents one school in both urban and rural areas.

Howz it?

Kia ora

See urban map insert

Q18ai Statistics: Greetings

Greetings by Decile

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	cheers	-0.4354	0.9022	-2.2036	1.3328	-.4826	0.6294
item	gidday	-1.5877	0.4070	-2.3855	-0.7899	-3.901	0.0001
item	hi_ya	-8.1247	2.1626	-12.3633	-3.8862	-3.757	0.0002
item	howz_it	0.0279	0.5372	-1.0249	1.0807	0.0520	0.9585
item	kia_ora	-0.5518	0.5374	-1.6050	0.5014	-1.027	0.3045
item	whats_up	0.5889	0.3852	-0.1661	1.3438	1.5287	0.1263
decile*item	cheers	-1.1505	0.3478	-1.8322	-0.4689	-3.308	**0.0009**
decile*item	gidday	0.1801	0.0620	0.0586	0.3016	2.9062	**0.0037**
decile*item	hi_ya	0.6916	0.2424	0.2164	1.1667	2.8528	**0.0043**
decile*item	howz_it	-0.4605	0.1312	-0.7176	-0.2034	-3.510	**0.0004**
decile*item	kia_ora	-0.2748	0.1136	-0.4975	-0.0522	-2.419	**0.0156**
decile*item	whats_up	-0.1604	0.0622	-0.2824	-0.0384	-2.577	**0.0100**
scale	0.9230	.	.	.	.	.	

Greetings by Main Region

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	cheers	1	-1.2993	0.6513	3.9792	0.0461
item	gidday	1	0.5878	0.5578	1.1105	0.2920
item	hi_ya	1	-1.7918	0.7638	5.5035	0.0190
item	howz_it	1	-26.3656	0.5888	2005.2260	0.0001
item	kia_ora	1	-2.5649	1.0377	6.1090	0.0134
item	whats_up	1	-1.2993	0.6513	3.9792	0.0461
item*region1	cheers, 1	1	-25.0660	70342.8077	0.0000	0.9997
item*region1	cheers, 2	1	-25.0660	60132.5783	0.0000	0.9997
item*region1	cheers, 3	0	0.0000	0.0000	.	.
item*region1	gidday, 1	1	-2.4002	0.6757	12.6190	**0.0004**
item*region1	gidday, 2	1	-0.6391	0.6020	1.1269	0.2884
item*region1	gidday, 3	0	0.0000	0.0000	.	.
item*region1	hi_ya, 1	1	-1.0986	0.9670	1.2906	0.2559
item*region1	hi_ya, 2	1	-1.4271	0.9644	2.1900	0.1389
item*region1	hi_ya, 3	0	0.0000	0.0000	.	.
item*region1	howz_it, 1	1	25.2435	0.6643	1443.8218	**0.0001**
item*region1	howz_it, 2	0	23.1467	0.0000	.	.
item*region1	howz_it, 3	0	0.0000	0.0000	.	.
item*region1	kia_ora, 1	1	1.0174	1.0946	0.8639	0.3527
item*region1	kia_ora, 2	1	0.3959	1.1028	0.1289	0.7196
item*region1	kia_ora, 3	0	0.0000	0.0000	.	.
item*region1	whats_up, 1	1	1.6901	0.7051	5.7462	**0.0165**
item*region1	whats_up, 2	1	0.5479	0.6951	0.6213	0.4306
item*region1	whats_up, 3	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 -2 for cheers	1	-0.0000	.	LR
1 -2 for gidday	1	18.8938	**0.0001**	LR
1 -2 for hi_ya	1	0.1539	0.6948	LR
1 -2 for kia_ora	1	1.4937	0.2216	LR
1 -2 for whats_up	1	10.2689	**0.0014**	LR

Greetings by Sub-Region

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	cheers	1	-1.2993	0.6513	3.9792	0.0461
item	gidday	1	0.5878	0.5578	1.1105	0.2920
item	hi_ya	1	-1.7918	0.7638	5.5035	0.0190
item	howz_it	1	-26.3650	0.7416	1263.8432	0.0001
item	kia_ora	1	-2.5649	1.0377	6.1090	0.0134
item	whats_up	1	-1.2993	0.6513	3.9792	0.0461
item*region2	cheers, 1	1	-25.0660	216811.094	0.0000	0.9999
item*region2	cheers, 2	1	-25.0660	216811.094	0.0000	0.9999
item*region2	cheers, 3	1	-25.0660	121837.317	0.0000	0.9998
item*region2	cheers, 4	1	-25.0660	104152.681	0.0000	0.9998
item*region2	cheers, 5	1	-25.0660	153308.595	0.0000	0.9999
item*region2	cheers, 6	1	-25.0660	113225.901	0.0000	0.9998
item*region2	cheers, 7	1	-25.0660	177025.517	0.0000	0.9999
item*region2	cheers, 8	1	-25.0660	216811.094	0.0000	0.9999
item*region2	cheers, 9	1	-25.0660	125175.944	0.0000	0.9998
item*region2	cheers, 10	1	-25.0660	167941.152	0.0000	0.9999
item*region2	cheers, 11	0	0.0000	0.0000	.	.
item*region2	gidday, 1	1	-2.1972	1.2293	3.1949	0.0739
item*region2	gidday, 2	1	-26.9531	216811.094	0.0000	0.9999
item*region2	gidday, 3	1	-1.6174	0.7632	4.4907	**0.0341**
item*region2	gidday, 4	1	-3.0727	0.9235	11.0714	**0.0009**
item*region2	gidday, 5	1	-1.2809	0.8283	2.3914	0.1220
item*region2	gidday, 6	1	-1.3499	0.7216	3.5002	0.0614
item*region2	gidday, 7	1	-0.8109	0.8724	0.8640	0.3526
item*region2	gidday, 8	1	1.0217	1.2293	0.6907	0.4059
item*region2	gidday, 9	1	-0.3646	0.7322	0.2480	0.6185
item*region2	gidday, 10	1	0.7985	0.9675	0.6811	0.4092
item*region2	gidday, 11	0	0.0000	0.0000	.	.
item*region2	hi_ya, 1	1	-24.5736	216811.094	0.0000	0.9999
item*region2	hi_ya, 2	1	-24.5736	216811.094	0.0000	0.9999
item*region2	hi_ya, 3	1	0.1178	0.9895	0.0142	0.9053
item*region2	hi_ya, 4	1	-24.5736	104152.681	0.0000	0.9998
item*region2	hi_ya, 5	1	-24.5736	153308.595	0.0000	0.9999
item*region2	hi_ya, 6	1	-0.5108	1.0646	0.2302	0.6313
item*region2	hi_ya, 7	1	-24.5736	177025.517	0.0000	0.9999
item*region2	hi_ya, 8	1	-24.5736	216811.094	0.0000	0.9999
item*region2	hi_ya, 9	1	-1.0415	1.2815	0.6605	0.4164
item*region2	hi_ya, 10	1	-24.5736	167941.152	0.0000	0.9999
item*region2	hi_ya, 11	0	0.0000	0.0000	.	.
item*region2	howz_it, 1	1	27.9744	1.3229	447.1827	**0.0001**
item*region2	howz_it, 2	1	25.6719	1.1402	506.9574	**0.0001**

item*region2	howz_it, 3	1	24.2249	1.0530	529.2528	**0.0001**
item*region2	howz_it, 4	1	24.9299	0.8931	779.1955	**0.0001**
item*region2	howz_it, 5	1	23.9671	1.2810	350.0636	**0.0001**
item*region2	howz_it, 6	0	24.0624	0.0000	.	.
item*region2	howz_it, 7	1	-0.0003	177025.517	0.0000	1.0000
item*region2	howz_it, 8	1	-0.0003	216811.094	0.0000	1.0000
item*region2	howz_it, 9	1	-0.0003	125175.944	0.0000	1.0000
item*region2	howz_it, 10	1	-0.0003	167941.152	0.0000	1.0000
item*region2	howz_it, 11	0	0.0000	0.0000	.	.
item*region2	kia_ora, 1	1	3.2581	1.3516	5.8104	**0.0159**
item*region2	kia_ora, 2	1	-23.8004	216811.094	0.0000	0.9999
item*region2	kia_ora, 3	1	0.8910	1.2136	0.5390	0.4628
item*region2	kia_ora, 4	1	0.5281	1.2057	0.1918	0.6614
item*region2	kia_ora, 5	1	1.4663	1.2334	1.4133	0.2345
item*region2	kia_ora, 6	1	0.7191	1.2095	0.3535	0.5521
item*region2	kia_ora, 7	1	0.4855	1.4839	0.1071	0.7435
item*region2	kia_ora, 8	1	-23.8004	216811.094	0.0000	0.9999
item*region2	kia_ora, 9	1	-0.2683	1.4614	0.0337	0.8544
item*region2	kia_ora, 10	1	-23.8004	167941.152	0.0000	0.9999
item*region2	kia_ora, 11	0	0.0000	0.0000	.	.
item*region2	whats_up, 1	1	27.6646	216810.819	0.0000	0.9999
item*region2	whats_up, 2	1	0.6061	1.0836	0.3129	0.5759
item*region2	whats_up, 3	1	2.6210	0.8608	9.2722	**0.0023**
item*region2	whats_up, 4	1	0.9891	0.7628	1.6816	0.1947
item*region2	whats_up, 5	1	0.2007	0.9320	0.0464	0.8295
item*region2	whats_up, 6	1	1.1170	0.7795	2.0534	0.1519
item*region2	whats_up, 7	1	0.6061	0.9614	0.3975	0.5284
item*region2	whats_up, 8	1	-25.0660	216811.094	0.0000	0.9999
item*region2	whats_up, 9	1	0.6061	0.8211	0.5449	0.4604
item*region2	whats_up, 10	1	0.4520	0.9489	0.2269	0.6338
item*region2	whats_up, 11	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

Greetings by Island

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	cheers	1	-2.8904	0.5932	23.7437	0.0001
item	gidday	1	0.5390	0.2746	3.8532	0.0497
item	hi_ya	1	-2.8904	0.5932	23.7437	0.0001
item	howz_it	1	-26.3654	0.2683	9657.1608	0.0001
item	kia_ora	1	-2.8904	0.5932	23.7437	0.0001
item	whats_up	1	-1.0296	0.3008	11.7171	0.0006
item*island	cheers, 1	1	-23.4750	55070.0730	0.0000	0.9997
item*island	cheers, 2	0	0.0000	0.0000	.	.
item*island	gidday, 1	1	-1.8337	0.3730	24.1744	**0.0001**
item*island	gidday, 2	0	0.0000	0.0000	.	.
item*island	hi_ya, 1	1	0.0225	0.7505	0.0009	0.9761
item*island	hi_ya, 2	0	0.0000	0.0000	.	.
item*island	howz_it, 1	0	24.8679	0.0000	.	.
item*island	howz_it, 2	0	0.0000	0.0000	.	.
item*island	kia_ora, 1	1	1.3192	0.6537	4.0721	**0.0436**
item*island	kia_ora, 2	0	0.0000	0.0000	.	.
item*island	whats_up, 1	1	1.0942	0.3654	8.9655	**0.0028**
item*island	whats_up, 2	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

Greetings by Catholic

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	cheers	1	-25.3653	0.5841	1885.9958	0.0001
item	gidday	1	-0.7885	0.5394	2.1370	0.1438
item	hi_ya	1	-25.3653	0.3885	4263.1361	0.0001
item	howz_it	1	-2.7081	1.0328	6.8752	0.0087
item	kia_ora	1	-2.7081	1.0328	6.8752	0.0087
item	whats_up	1	0.0000	0.5000	0.0000	1.0000
item*catholic	cheers, 1	0	21.6119	0.0000	.	.
item*catholic	cheers, 2	0	0.0000	0.0000	.	.
item*catholic	gidday, 1	1	0.2736	0.5688	0.2313	0.6305
item*catholic	gidday, 2	0	0.0000	0.0000	.	.
item*catholic	hi_ya, 1	0	22.4910	0.0000	.	.
item*catholic	hi_ya, 2	0	0.0000	0.0000	.	.
item*catholic	howz_it, 1	1	0.7357	1.0667	0.4757	0.4904
item*catholic	howz_it, 2	0	0.0000	0.0000	.	.
item*catholic	kia_ora, 1	1	0.8710	1.0635	0.6708	0.4128
item*catholic	kia_ora, 2	0	0.0000	0.0000	.	.
item*catholic	whats_up, 1	1	-0.3234	0.5304	0.3717	0.5421
item*catholic	whats_up, 2	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

Greetings by Urban/Rural

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	cheers	-4.0604	1.0086	-6.0372	-2.0837	-4.026	0.0001
item	gidday	-0.7444	0.2786	-1.2905	-0.1983	-2.672	0.0075
item	hi_ya	-2.1785	0.4307	-3.0228	-1.3343	-5.058	0.0000
item	howz_it	-2.6210	0.5179	-3.6360	-1.6060	-5.061	0.0000
item	kia_ora	-2.1785	0.4307	-3.0228	-1.3343	-5.058	0.0000
item	whats_up	0.1699	0.2613	-0.3423	0.6821	0.6502	0.5156
item*urb_rur	cheers, 1	0.3228	1.2366	-2.1009	2.7464	0.2610	0.7941
item*urb_rur	cheers, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	gidday, 1	0.2707	0.3561	-0.4273	0.9686	0.7601	0.4472
item*urb_rur	gidday, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	hi_ya, 1	-1.5591	0.8351	-3.1960	0.0777	-1.867	0.0619
item*urb_rur	hi_ya, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	howz_it, 1	0.8955	0.5990	-0.2785	2.0696	1.4950	0.1349
item*urb_rur	howz_it, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	kia_ora, 1	0.4530	0.5255	-0.5769	1.4830	0.8621	0.3886
item*urb_rur	kia_ora, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	whats_up, 1	-0.8457	0.3469	-1.5255	-0.1658	-2.438	**0.0148**
item*urb_rur	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

Greetings by Big Region and Decile, Model 2 (no sig. figs. Model 1)

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	cheers	1	94.2662	36410.3735	0.0000	0.9979
item	gidday	1	-0.2908	0.6916	0.1768	0.6741
item	hi_ya	1	-7.8593	2.6409	8.8562	0.0029
item	howz_it	1	-24.4310	0.7979	937.4641	0.0001
item	kia_ora	1	-1.2562	1.1360	1.2229	0.2688
item	whats_up	1	-0.6573	0.7434	0.7817	0.3766
item*region1	cheers, 1	1	-80.1570	55364.8136	0.0000	0.9988
item*region1	cheers, 2	1	-78.8759	43932.5278	0.0000	0.9986
item*region1	cheers, 3	0	0.0000	0.0000	.	.
item*region1	gidday, 1	1	-2.3533	0.6886	11.6810	**0.0006**
item*region1	gidday, 2	1	-0.7706	0.6197	1.5464	0.2137
item*region1	gidday, 3	0	0.0000	0.0000	.	.
item*region1	hi_ya, 1	1	-0.7744	1.0975	0.4979	0.4804
item*region1	hi_ya, 2	1	-2.0525	1.1013	3.4735	0.0624
item*region1	hi_ya, 3	0	0.0000	0.0000	.	.
item*region1	howz_it, 1	1	25.0793	0.6940	1306.0249	**0.0001**
item*region1	howz_it, 2	0	23.3719	0.0000	.	.
item*region1	howz_it, 3	0	0.0000	0.0000	.	.
item*region1	kia_ora, 1	1	0.8624	1.1177	0.5954	0.4403
item*region1	kia_ora, 2	1	0.6147	1.1294	0.2962	0.5863
item*region1	kia_ora, 3	0	0.0000	0.0000	.	.
item*region1	whats_up, 1	1	1.6278	0.7120	5.2274	**0.0222**
item*region1	whats_up, 2	1	0.6375	0.7040	0.8199	0.3652
item*region1	whats_up, 3	0	0.0000	0.0000	.	.
decile*item	cheers	1	-37.5618	14239.6194	0.0000	0.9979
decile*item	gidday	1	0.1563	0.0716	4.7653	**0.0290**
decile*item	hi_ya	1	0.8163	0.2969	7.5594	**0.0060**
decile*item	howz_it	1	-0.4241	0.1340	10.0125	**0.0016**
decile*item	kia_ora	1	-0.2678	0.1026	6.8140	**0.0090**
decile*item	whats_up	1	-0.1162	0.0659	3.1105	0.0778
scale	0	1.00	0.0000	.	.	

Greetings by Island and Decile, Model 2 (no sig. figs. Model 1)

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	cheers	1	46.2865	1.2247	1428.2958	0.0001
item	gidday	1	-0.3751	0.5307	0.4996	0.4797
item	hi_ya	1	-8.4215	2.3688	12.6394	0.0004
item	howz_it	1	-26.1846	0.5323	2420.0556	0.0001
item	kia_ora	1	-1.5070	0.7969	3.5761	0.0586

item	whats_up	1	-0.2179	0.4982	0.1913	0.6618
item*island	cheers, 1	1	-48.8128	105123.424	0.0000	0.9996
item*island	cheers, 2	0	0.0000	0.0000	.	.
item*island	gidday, 1	1	-1.7210	0.3791	20.6109	**0.0001**
item*island	gidday, 2	0	0.0000	0.0000	.	.
item*island	hi_ya, 1	1	0.3880	0.7906	0.2409	0.6235
item*island	hi_ya, 2	0	0.0000	0.0000	.	.
item*island	howz_it, 1	0	26.3712	0.0000	.	.
item*island	howz_it, 2	0	0.0000	0.0000	.	.
item*island	kia_ora, 1	1	1.0329	0.6724	2.3598	0.1245
item*island	kia_ora, 2	0	0.0000	0.0000	.	.
item*island	whats_up, 1	1	0.9612	0.3738	6.6112	**0.0101**
item*island	whats_up, 2	0	0.0000	0.0000	.	.
decile*item	cheers	0	-22.7967	0.0000	.	.
decile*item	gidday	1	0.1422	0.0713	3.9768	**0.0461**
decile*item	hi_ya	1	0.7007	0.2592	7.3069	**0.0069**
decile*item	howz_it	1	-0.3859	0.1257	9.4197	**0.0021**
decile*item	kia_ora	1	-0.2341	0.0994	5.5482	**0.0185**
decile*item	whats_up	1	-0.1277	0.0638	4.0063	**0.0453**
scale	0	1.00	0.0000	.	.	

Greetings by Urban/Rural and Decile, Model 1

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	cheers	-1.1980	1.1868	-3.5241	1.1281	-1.009	0.3128
item	gidday	-1.8727	0.7191	-3.2822	-0.4633	-2.604	0.0092
item	hi_ya	-7.5990	3.4701	-14.4003	-0.7977	-2.190	0.0285
item	howz_it	-1.6206	1.0740	-3.7257	0.4844	-1.509	0.1313
item	kia_ora	-2.1144	1.0518	-4.1758	-0.0529	-2.010	0.0444
item	whats_up	0.5888	0.6505	-0.6862	1.8637	0.9051	0.3654
item*urbrur	cheers, 1	1.4712	1.8219	-2.0997	5.0420	0.8075	0.4194
item*urbrur	cheers, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	gidday, 1	0.0259	0.9172	-1.7718	1.8236	0.0282	0.9775
item*urbrur	gidday, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	hi_ya, 1	-0.0361	3.5796	-7.0519	6.9798	-.0101	0.9920
item*urbrur	hi_ya, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	howz_it, 1	2.5454	1.2556	0.0843	5.0064	2.0271	**0.0426**
item*urbrur	howz_it, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	kia_ora, 1	2.5201	1.2710	0.0290	5.0113	1.9827	**0.0474**
item*urbrur	kia_ora, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	whats_up, 1	0.7004	0.8540	-0.9735	2.3742	0.8200	0.4122
item*urbrur	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

decile*item	cheers	-0.7673	0.1446	-1.0508	-0.4839	-5.306	**0.0000**
decile*item	gidday	0.1692	0.0972	-0.0214	0.3598	1.7401	0.0818
decile*item	hi_ya	0.6741	0.3768	-0.0644	1.4125	1.7891	0.0736
decile*item	howz_it	-0.1735	0.1859	-0.5378	0.1908	-.9332	0.3507
decile*item	kia_ora	-0.0098	0.1515	-0.3068	0.2871	-.0650	0.9482
decile*item	whats_up	-0.0650	0.0911	-0.2436	0.1136	-.7131	0.4758
dec*itm*ur	cheers, 1	-0.7816	0.7468	-2.2453	0.6820	-1.047	0.2953
dec*itm*ur	cheers, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
dec*itm*ur	gidday, 1	0.0828	0.1355	-0.1828	0.3484	0.6109	0.5413
dec*itm*ur	gidday, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
dec*itm*ur	hi_ya, 1	-0.1005	0.3891	-0.8630	0.6621	-.2582	0.7962
dec*itm*ur	hi_ya, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
dec*itm*ur	howz_it, 1	-0.4957	0.2471	-0.9800	-0.0115	-2.006	**0.0448**
dec*itm*ur	howz_it, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
dec*itm*ur	kia_ora, 1	-0.4951	0.2448	-0.9749	-0.0153	-2.022	**0.0431**
dec*itm*ur	kia_ora, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
dec*itm*ur	whats_up, 1	-0.3389	0.1398	-0.6129	-0.0649	-2.424	**0.0154**
dec*itm*ur	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	0.9040	.	.	.	.	.	

Greetings by Decile in Urban Schools

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	cheers	-1.1883	1.1786	-3.4983	1.1217	-1.008	0.3133
item	gidday	-1.8732	0.7190	-3.2823	-0.4641	-2.605	0.0092
item	hi_ya	-7.6507	3.5320	-14.5733	-0.7281	-2.166	0.0303
item	howz_it	-1.6170	1.0728	-3.7197	0.4856	-1.507	0.1317
item	kia_ora	-2.1134	1.0512	-4.1738	-0.0531	-2.010	0.0444
item	whats_up	0.5892	0.6506	-0.6860	1.8643	0.9056	0.3652
decile*item	cheers	-0.7698	0.1467	-1.0573	-0.4824	-5.249	0.0000
decile*item	gidday	0.1693	0.0972	-0.0212	0.3598	1.7419	0.0815
decile*item	hi_ya	0.6799	0.3829	-0.0705	1.4304	1.7758	0.0758
decile*item	howz_it	-0.1740	0.1859	-0.5384	0.1903	-.9361	0.3492
decile*item	kia_ora	-0.0099	0.1515	-0.3068	0.2869	-.0655	0.9478
decile*item	whats_up	-0.0650	0.0912	-0.2437	0.1137	-.7131	0.4758
scale	0.9323	.	.	.	.	.	

Greetings by Decile in Rural Schools

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	cheers	0.2271	1.3722	-2.4624	2.9166	0.1655	0.8686
item	gidday	-1.8498	0.5692	-2.9654	-0.7341	-3.250	0.0012
item	hi_ya	-7.6343	0.8793	-9.3576	-5.9109	-8.682	0.0000
item	howz_it	0.9208	0.6513	-0.3557	2.1973	1.4138	0.1574
item	kia_ora	0.4017	0.7147	-0.9990	1.8024	0.5621	0.5741
item	whats_up	1.2862	0.5526	0.2031	2.3693	2.3275	0.0199
decile*item	cheers	-1.5248	0.7134	-2.9230	-0.1266	-2.137	**0.0326**
decile*item	gidday	0.2524	0.0943	0.0675	0.4372	2.6760	**0.0075**
decile*item	hi_ya	0.5733	0.0972	0.3828	0.7637	5.8987	0.0000
decile*item	howz_it	-0.6684	0.1629	-0.9878	-0.3490	-4.102	**0.0000**
decile*item	kia_ora	-0.5042	0.1924	-0.8814	-0.1270	-2.620	**0.0088**
decile*item	whats_up	-0.4035	0.1058	-0.6109	-0.1960	-3.812	**0.0001**
scale	0.8847	.	.	.	.	.	

Greetings by Urban/Rural and Decile, Model 2

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	cheers	-0.3914	0.9664	-2.2855	1.5027	-.4050	0.6855
item	gidday	-2.2258	0.5713	-3.3455	-1.1061	-3.896	0.0001
item	hi_ya	-7.3352	2.2156	-11.6776	-2.9928	-3.311	0.0009
item	howz_it	-0.4408	0.5731	-1.5640	0.6825	-.7691	0.4418
item	kia_ora	-0.7210	0.5595	-1.8176	0.3755	-1.289	0.1975
item	whats_up	1.6084	0.5720	0.4873	2.7295	2.8118	0.0049
item*urbrur	cheers, 1	-0.0775	1.2855	-2.5971	2.4421	-.0603	0.9519
item*urbrur	cheers, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	gidday, 1	0.5969	0.3900	-0.1674	1.3612	1.5306	0.1259
item*urbrur	gidday, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	hi_ya, 1	-0.7203	0.8688	-2.4232	0.9826	-.8291	0.4071
item*urbrur	hi_ya, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	howz_it, 1	0.6435	0.6502	-0.6307	1.9178	0.9898	0.3223
item*urbrur	howz_it, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	kia_ora, 1	0.2396	0.5340	-0.8071	1.2863	0.4486	0.6537
item*urbrur	kia_ora, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urbrur	whats_up, 1	-1.1463	0.3919	-1.9144	-0.3782	-2.925	**0.0034**
item*urbrur	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
decile*item	cheers	-1.1395	0.3746	-1.8737	-0.4054	-3.042	**0.0023**
decile*item	gidday	0.2157	0.0685	0.0814	0.3499	3.1481	**0.0016**
decile*item	hi_ya	0.6368	0.2375	0.1713	1.1023	2.6814	**0.0073**
decile*item	howz_it	-0.4467	0.1334	-0.7082	-0.1852	-3.348	**0.0008**
decile*item	kia_ora	-0.2644	0.1105	-0.4809	-0.0479	-2.394	**0.0167**
decile*item	whats_up	-0.2239	0.0691	-0.3593	-0.0884	-3.239	**0.0012**
scale	0.9412	.	.	.	.	.	

Greetings by Main Region excluding Southern Region

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	cheers	1	-26.3653	60132.5783	0.0000	0.9997
item	gidday	1	-0.0513	0.2265	0.0513	0.8209
item	hi_ya	1	-3.2189	0.5888	29.8880	0.0001
item	howz_it	1	-3.2189	0.5888	29.8880	0.0001
item	kia_ora	1	-2.1691	0.3732	33.7780	0.0001
item	whats_up	1	-0.7514	0.2426	9.5914	0.0020
item*region1	cheers, 1	1	-0.0000	92542.0854	0.0000	1.0000
item*region1	cheers, 2	0	0.0000	0.0000	.	.
item*region1	gidday, 1	1	-1.7611	0.4435	15.7654	**0.0001**
item*region1	gidday, 2	0	0.0000	0.0000	.	.

item*region1	hi_ya, 1	1	0.3285	0.8358	0.1545	0.6943
item*region1	hi_ya, 2	0	0.0000	0.0000	.	.
item*region1	howz_it, 1	1	2.0967	0.6643	9.9610	**0.0016**
item*region1	howz_it, 2	0	0.0000	0.0000	.	.
item*region1	kia_ora, 1	1	0.6215	0.5105	1.4824	0.2234
item*region1	kia_ora, 2	0	0.0000	0.0000	.	.
item*region1	whats_up, 1	1	1.1423	0.3630	9.9031	**0.0017**
item*region1	whats_up, 2	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

Greetings by Main Region and Island, Model 2

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	cheers	1	-1.2993	0.6513	3.9792	0.0461
item	gidday	1	0.5878	0.5578	1.1105	0.2920
item	hi_ya	1	-1.7918	0.7638	5.5035	0.0190
item	howz_it	1	-26.3651	0.6038	1906.6164	0.0001
item	kia_ora	1	-2.5649	1.0377	6.1090	0.0134
item	whats_up	1	-1.2993	0.6513	3.9792	0.0461
item*region1	cheers, 1	1	-25.0660	139877.037	0.0000	0.9999
item*region1	cheers, 2	1	-25.0660	80988.4149	0.0000	0.9998
item*region1	cheers, 3	0	0.0000	0.0000	.	.
item*region1	gidday, 1	1	-1.0968	0.8298	1.7468	0.1863
item*region1	gidday, 2	1	-0.0645	0.6408	0.0101	0.9198
item*region1	gidday, 3	0	0.0000	0.0000	.	.
item*region1	hi_ya, 1	1	-2.0329	1.5778	1.6602	0.1976
item*region1	hi_ya, 2	1	-1.9459	1.2677	2.3561	0.1248
item*region1	hi_ya, 3	0	0.0000	0.0000	.	.
item*region1	howz_it, 1	1	1.2448	0.6777	3.3738	0.0662
item*region1	howz_it, 2	0	-0.0002	0.0000	.	.
item*region1	howz_it, 3	0	0.0000	0.0000	.	.
item*region1	kia_ora, 1	1	-0.4275	1.3870	0.0950	0.7579
item*region1	kia_ora, 2	1	-0.4555	1.2654	0.1296	0.7189
item*region1	kia_ora, 3	0	0.0000	0.0000	.	.
item*region1	whats_up, 1	1	1.2672	0.8574	2.1843	0.1394
item*region1	whats_up, 2	1	0.3502	0.7347	0.2272	0.6336
item*region1	whats_up,3	0	0.0000	0.0000	.	.
item*island	cheers, 1	1	0.0000	120902.750	0.0000	1.0000
item*island	cheers, 2	0	0.0000	0.0000	.	.
item*island	gidday, 1	1	-1.3034	0.4818	7.3192	**0.0068**
item*island	gidday, 2	0	0.0000	0.0000	.	.
item*island	hi_ya, 1	1	0.9343	1.2466	0.5617	0.4536
item*island	hi_ya, 2	0	0.0000	0.0000	.	.
item*island	howz_it, 1	0	23.9982	0.0000	.	.
item*island	howz_it, 2	0	0.0000	0.0000	.	.
item*island	kia_ora, 1	1	1.4449	0.8518	2.8774	0.0898
item*island	kia_ora 2	0	0.0000	0.0000	.	.
item*island	whats_up, 1	1	0.4230	0.4878	0.7519	0.3859
item*island	whats_up, 2	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

Further Stats for *What's up?*

***What's up* by Main Region and Decile, Model 2 (no sig. figs. Model 1)**
Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	whats_up	-0.6573	0.7559	-2.1389	0.8243	-.8695	0.3846
item*region1	whats_up, 1	1.6278	0.6813	0.2926	2.9631	2.3894	**0.0169**
item*region1	whats_up, 2	0.6375	0.6628	-0.6615	1.9365	0.9619	0.3361
item*region1	whats_up, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
decile*item	whats_up	-0.1162	0.0645	-0.2425	0.0102	-1.802	0.0715
scale	0.9958	.	.	.	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 –2 for whats_up	1	7.1327	**0.0076**	LR

***What's up* by Island and Decile, Model 2 (no sig. figs. Model 1)**
Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	whats_up	-0.2179	0.5091	-1.2158	0.7800	-.4280	0.6686
item*island	whats_up.1	0.9612	0.3733	0.2296	1.6928	2.5749	**0.0100**
item*island	whats_up.2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
decile*item	whats_up	-0.1277	0.0642	-0.2536	-0.0018	-1.988	**0.0468**
scale	0.9973	.	.	.	.	.	

***What's up* by Urban/Rural and Decile, Model 2 (Model 1 done earlier, + sep. stats)**
Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	whats_up	1.6148	0.5749	0.4881	2.7415	2.8090	0.0050
item*urb_rur	whats_up, 1	-1.1752	0.3934	-1.9462	-0.4042	-2.987	**0.0028**
item*urb_rur	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
decile*item	whats_up	-0.2216	0.0693	-0.3575	-0.0858	-3.197	**0.0014**
scale	0.9938	.	.	.	.	.	

***What's up* by Main Region and Island, Model 2 (no sig. figs. Model 1)**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	whats_up	-1.2993	0.6513	-2.5759	-0.0227	-1.995	0.0461
item*region1	whats_up, 1	1.2672	0.8574	-0.4133	2.9476	1.4779	0.1394
item*region1	whats_up, 2	0.3502	0.7347	-1.0898	1.7903	0.4766	0.6336
item*region1	whats_up, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	whats_up, 1	0.4230	0.4878	-0.5331	1.3791	0.8671	0.3859
item*island	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 –2 for whats_up	1	4.4332	**0.0352**	LR

***What's up* by Main Region and Urban/Rural, Model 2 (no sig. figs. Model 1)**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	whats_up	-0.6032	0.7171	-2.0087	0.8023	-.8412	0.4002
item*region1	whats_up, 1	1.7384	0.7532	0.2623	3.2146	2.3082	**0.0210**
item*region1	whats_up, 2	0.3301	0.7322	-1.1051	1.7652	0.4508	0.6522
item*region1	whats_up, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	whats_up, 1	-1.0658	0.3835	-1.8175	-0.3141	-2.779	**0.0055**
item*urb_rur	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	0.9989	.	.	.	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 –2 for whats_up	1	13.7458	**0.0002**	LR

***What's up* by Island and Urban/Rural, Model 2 (no sig. figs. Model 1)**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	whats_up	-0.6628	0.3880	-1.4234	0.0977	-1.708	0.0876
item*island	whats_up, 1	1.2315	0.3822	0.4824	1.9806	3.2221	**0.0013**
item*island	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	whats_up, 1	-0.8081	0.3638	-1.5211	-0.0951	-2.221	**0.0263**
item*urb_rur	whats_up, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	0.9946	.	.	.	.	.	

Further Stats for just *gidday*

***Gidday* by Decile**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	gidday	-1.6044	0.4087	-2.4054	-0.8034	-3.926	0.0001
decile*item	gidday	0.1827	0.0623	0.0606	0.3048	2.9320	**0.0034**
scale	0.9951	.	.	.	.	.	

***Gidday* by Main Region**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	gidday	0.5878	0.5578	-0.5054	1.6810	1.0538	0.2920
item*region1	gidday, 1	-2.4002	0.6757	-3.7244	-1.0759	-3.552	**0.0004**
item*region1	gidday, 2	-0.6391	0.6020	-1.8190	0.5409	-1.062	0.2884
item*region1	gidday, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 –2 for gidday	1	18.8938	**0.0001**	LR

***Gidday* by Island**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	gidday	0.5390	0.2746	0.0008	1.0772	1.9630	0.0497
item*island	gidday, 1	-1.8337	0.3730	-2.5647	-1.1027	-4.917	**0.0000**
item*island	gidday, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

Gidday by Main Region and Decile

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	.
item	gidday	-0.2908	0.6830	-1.6295	1.0479	-.4258	0.6703
item*region1	gidday, 1	-2.3533	0.6634	-3.6535	-1.0531	-3.547	**0.0004**
item*region1	gidday, 2	-0.7706	0.5996	-1.9459	0.4046	-1.285	0.1987
item*region1	gidday, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
decile*item	gidday	0.1563	0.0704	0.0185	0.2942	2.2224	**0.0263**
scale	0.9769	.	.	.	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 –2 for gidday	1	14.0253	**0.0002**	LR

Gidday by Island and Decile

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	gidday	-0.3751	0.5041	-1.3632	0.6129	-.7441	0.4568
item*island	gidday, 1	-1.7210	0.3819	-2.4696	-0.9724	-4.506	**0.0000**
item*island	gidday, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
decile*item	gidday	0.1422	0.0673	0.0104	0.2741	2.1139	**0.0345**
scale	0.9912	.	.	.	.	.	

Gidday by Island and Decile

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	gidday	0.5878	0.5578	-0.5054	1.6810	1.0538	0.2920
item*region1	gidday, 1	-1.0968	0.8298	-2.7232	0.5297	-1.322	0.1863
item*region1	gidday, 2	-0.0645	0.6408	-1.3205	1.1914	-.1007	0.9198
item*region1	gidday, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	gidday, 1	-1.3034	0.4818	-2.2477	-0.3591	-2.705	**0.0068**
item*island	gidday, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 –2 for gidday	1	3.9009	**0.0483**	LR

Further stats for *Howz it*

***Howz it* in Northern and Central Regions only**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	howz_it	-3.2189	0.5888	-4.3729	-2.0649	-5.467	0.0000
item*region1	howz_it, 1	2.0967	0.6643	0.7946	3.3988	3.1561	**0.0016**
item*region1	howz_it, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

***Howz it* by Decile in North Island only**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	howz_it	0.1866	0.5451	-0.8818	1.2550	0.3424	0.7321
decile*item	howz_it	-0.3859	0.1277	-0.6362	-0.1356	-3.022	**0.0025**
scale	1.0029	.	.	.	.	.	

***Howz it* by Decile and Main Region in N and C only**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	.
item	howz_it	-1.0591	0.6797	-2.3912	0.2730	-1.558	0.1192
item*region1	howz_it, 1	1.7074	0.6882	0.3585	3.0563	2.4808	**0.0131**
item*region1	howz_it, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
decile*item	howz_it	-0.4241	0.1383	-0.6952	-0.1530	-3.066	**0.0022**
scale	1.2460	.	.	.	.	.	.

***Howz it* in Relevant Sub-regions only**

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	howz_it	-2.3026	0.7416	-3.7561	-0.8490	-3.105	0.0019
item*region2	howz_it, 1	3.9120	1.3229	1.3192	6.5048	2.9572	**0.0031**
item*region2	howz_it, 2	1.6094	1.1402	-0.6253	3.8441	1.4116	0.1581
item*region2	howz_it, 3	0.1625	1.0530	-1.9013	2.2264	0.1543	0.8773
item*region2	howz_it, 4	0.8675	0.8931	-0.8829	2.6179	0.9713	0.3314
item*region2	howz_it, 5	-0.0953	1.2810	-2.6060	2.4154	-.0744	0.9407
item*region2	howz_it, 6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

