***No gives*: refusing to accept the undesirable**
Laurie and Winifred Bauer

Question 11 asked what you say to prevent someone from giving you something you don't want:

11 At your school, are there special things you do and say to stop someone giving you something you don't want? If so, what?

In quite a lot of cases, we suspect that children responded as if to the commoner situation (asked about in Q12) – preventing someone from giving back something unwanted which you have given them – rather than to the actual situation presented in 11. However, this is not certain: the data we obtained could also be explained if some of the responses have extended meanings.

The situation in 11 arises in classrooms in two principal contexts:

1 One child gives another a piece of rubbish (or similar).
2 One child gives another 'kooties' (or germs, goobies, etc) which they claim to have got by accidentally touching another child. This often happens if two children of opposite sex have accidentally touched, but it can also happen if two children from different social circles touch in this way.

The responses we got reflected both these situations. However, because the second situation is rather more specific, there were fewer responses which clearly belonged only to that situation. These included *No germs, no cooties, no goobies*, and possibly responses like *vaccinated*.

There were large numbers of different responses, and it was necessary to group them to reduce the data to manageable proportions. The following are the principal simplifications which were made:

Forms with *for life, for life and death, forever* (e.g. *pegs for life*) were grouped with the base form (in the above case, with *pegs*).

Variants of bases (e.g. *pegs, pagsed, pax*) were grouped.

Where the response was simply a truce term, these terms were grouped under one heading, since in this context it is more important to recognise that a truce term gives protection, rather than noting the variety of truce terms in use round the country. Thus *pegs, fans, gates*, etc. were all taken as instances of the category 'truce term'.

Responses with very low numbers were then eliminated.

Nine categories of answer then remained. They were (with frequencies in brackets): *bags not* (50); *no bags* (27); *no backs* (18); *no returns* (18); truce term (e.g. *fans, gates, quits, pegs*) (17); *white rabbit(s)* (11); *pegs not* (10); *no gives* (7); *shotgun not* (4). There were few absolutes in the distribution of these terms, but a number of tendencies which are worth noting.

Bags not is the commonest expression in this context, but it is not quite evenly distributed round the country. It is less frequent in the Central Region than in the Northern and Southern Regions. This is in part because in the Central Region it is in competition with *pegs* and a number of other expressions.

No bags is considerably more frequent in the Northern Region than elsewhere. Only three of its 27 occurrences are in the South Island (two of them in Nelson-Marlborough), and only 6 are south of the line from Bay of Plenty to Taranaki.

No returns is predominantly found in the Central Region, but there are two reports from the Northern Region (Northland and Auckland), and three in Southland-Otago.

Truce terms are scattered from Northland to Southland. The individual truce terms are distributed in accordance with their distribution in other contexts.
No backs is found from Northland to Southland, and there were a number of small pockets of strength: four occurrences were in Auckland, three were in Christchurch, and five were in Southland-Otago.
White rabbit(s) (a common term for immunity in other contexts, such as the first of the month) is also predominantly found in the Central Region, but there was one report from Northland, and one from the Hauraki Plains. There was no apparent pattern in the distribution of the singular as opposed to the plural.
Pegs not is largely a feature of the Central Region, and is particularly strong in Hawkes Bay. However, it is also recorded in Poverty Bay and at the northern end of the volcanic plateau, which is further north than in other contexts, see Q's 9 and 10. (Note that this is the extension of the truce term *pegs* into the "Laying claim" function.)
No gives is found dotted from Auckland to Bluff. However, this grouping includes three occurrences of *no givings*, and these were all from the South Island, two in Canterbury and one in Otago.
Shotgun not is recorded three times in Northland – Auckland, and once – rather surprisingly – in Timaru.
The distribution thus provides some support for the tri-partite division proposed on the basis of other data.

Statistical Analysis

Bags not, no returns, no bags, pegs not and *white rabbits* were included in the statistical analysis.

Bags not

Bags not is significantly more common in the Northern Region than the Central Region (p-value 0.0002). It is not affected by other factors.

No returns

No returns is more likely to be used in high decile schools (p-value 0.0055). There was significantly less use of *no returns* in the Northern Region compared with the Central Region (p-value 0.0104), and significantly less in the Northern Region than in the Southern Region (p-value 0.0379). The difference between the Central and Southern Regions was not significant.
When the interaction between Decile and Main Region was investigated, the program showed that when Decile is taken into account, the p-value for the Northern – Central contrast is just significant (0.0395), and for the Northern – Southern contrast is not quite significant (p-value 0.0557). And when the effect of Main Region is taken into account, *no returns* is almost significantly high decile (p-value 0.0575). This suggests that the Main Region effect is stronger than the Decile effect, and that to a large extent, the correlation with high decile is the result of *no returns* being less common in the Northern Region than elsewhere.

No bags

No bags was not reported at all from the Southern Region. When the Southern Region was deleted from the analysis, the program showed that *no bags* is significantly more common in the Northern Region than the Central Region (p-

value 0.0001). *No bags* was also shown to be more likely in the North Island than the South Island (p-value 0.0041), but it must be asked whether this is because of its prevalence in the Northern Region. When the interaction between Island and Main Region was investigated, it indicated that the Main Region effect is still very strong when Island is taken into account: the p-value for the Northern – Central contrast is 0.0015, and the Northern – Southern contrast is 0.0001. The Island effect was not significant (0.7930) when Main Region was taken into account. This makes it fairly clear that the correlation of *no bags* with the North Island is largely the result of its prevalence in the Northern Region.

Pegs not

Pegs not was not reported at all from the Southern Region. In terms of Sub-region, the results show the uneven distribution of *pegs not*: it was only reported from CNIs, HB-W, Chch and T-CL. It was not affected by other factors.

White rabbits

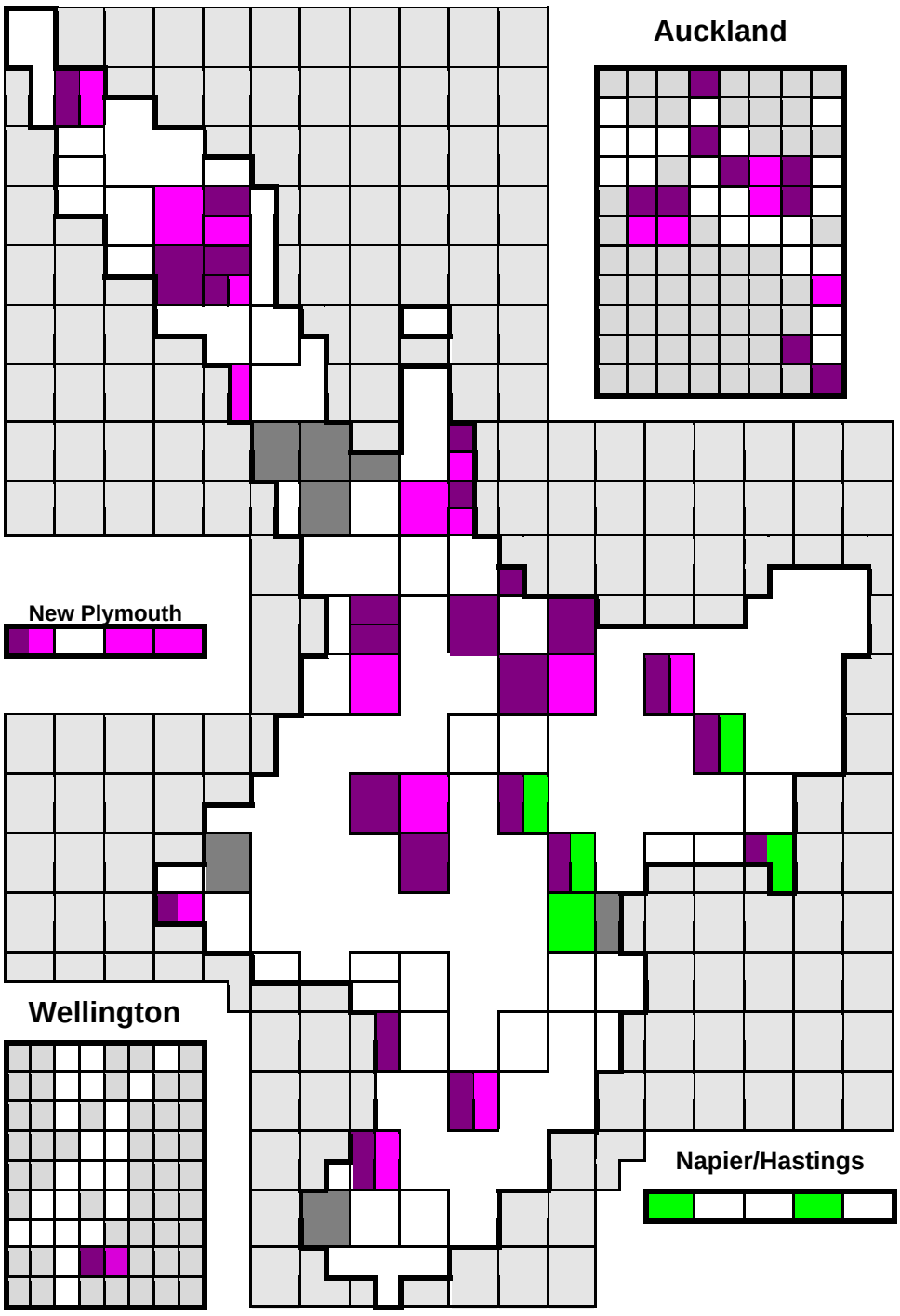
White rabbits was not reported at all from the Southern Region, but otherwise showed no significant correlations with any of the factors considered.

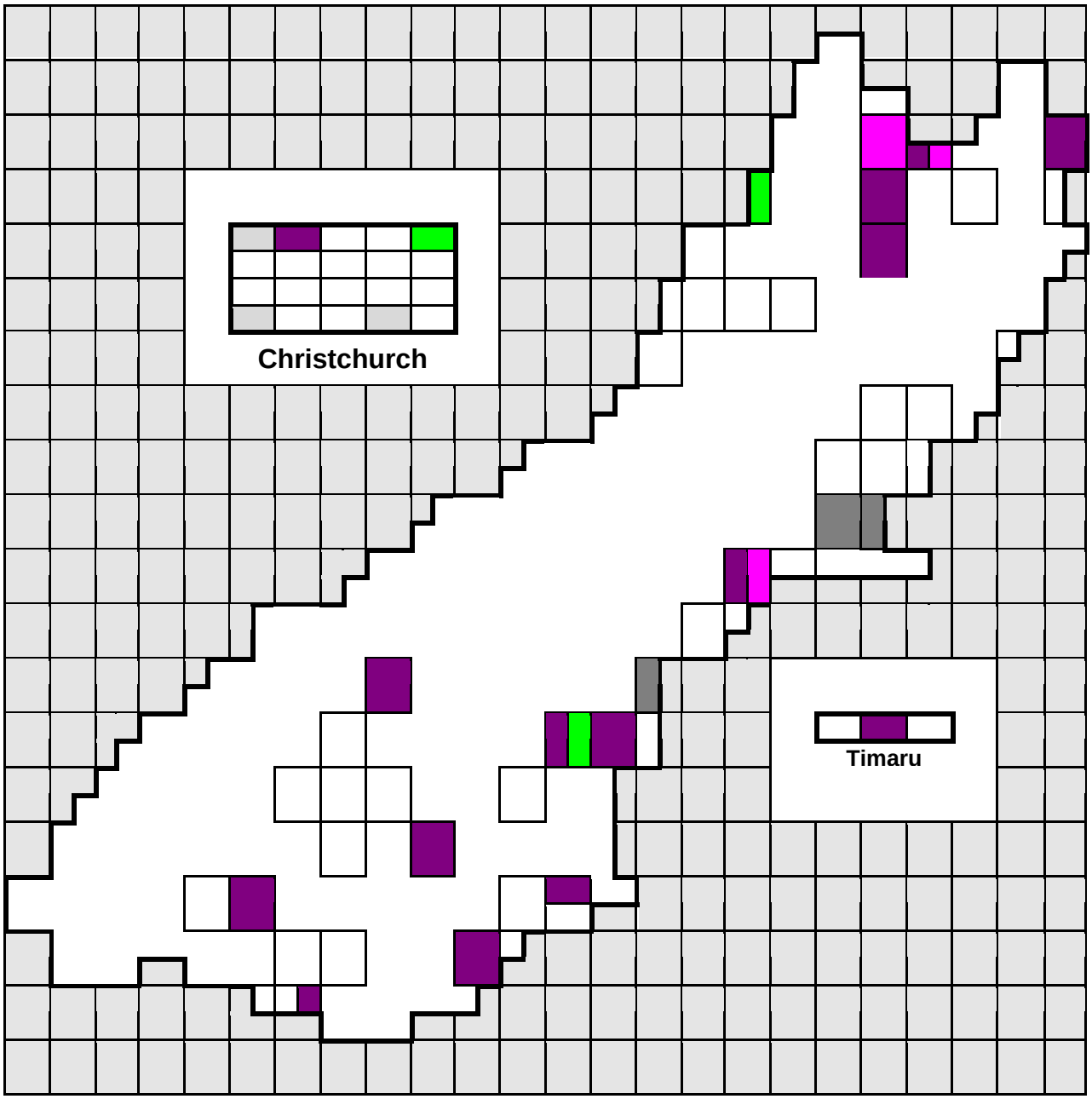
Summary

This set of data provides further support for the division into Main Regions, with the division between the Central and Northern Regions particularly strongly supported. Once again, the Southern Region is characterised by an absence of certain forms.

Two maps follow, showing the distribution of the most significant forms in this set of data.

Map 1: Alternatives to *No gives: bags not, no bags, pegs not*





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.

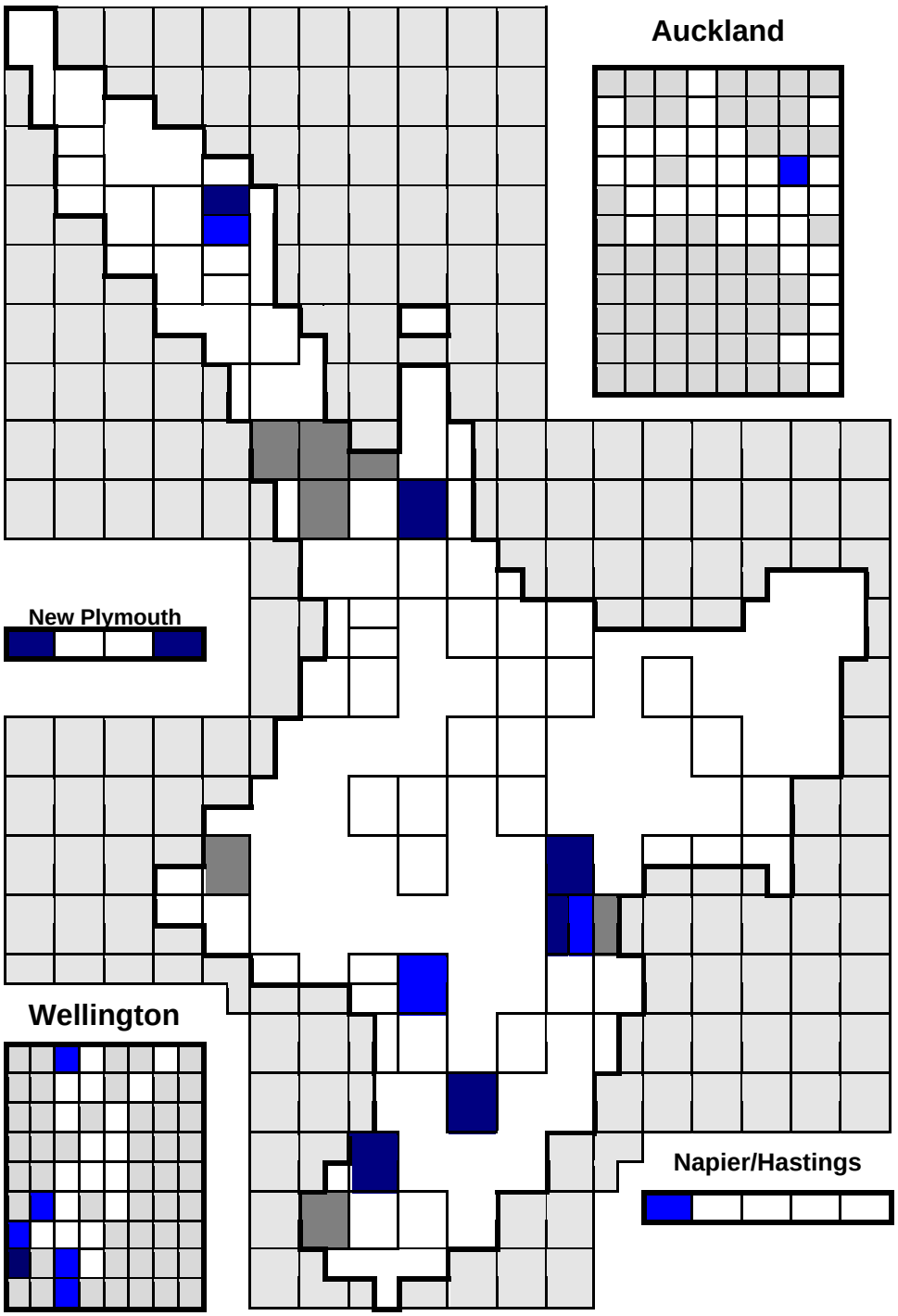
Bags not

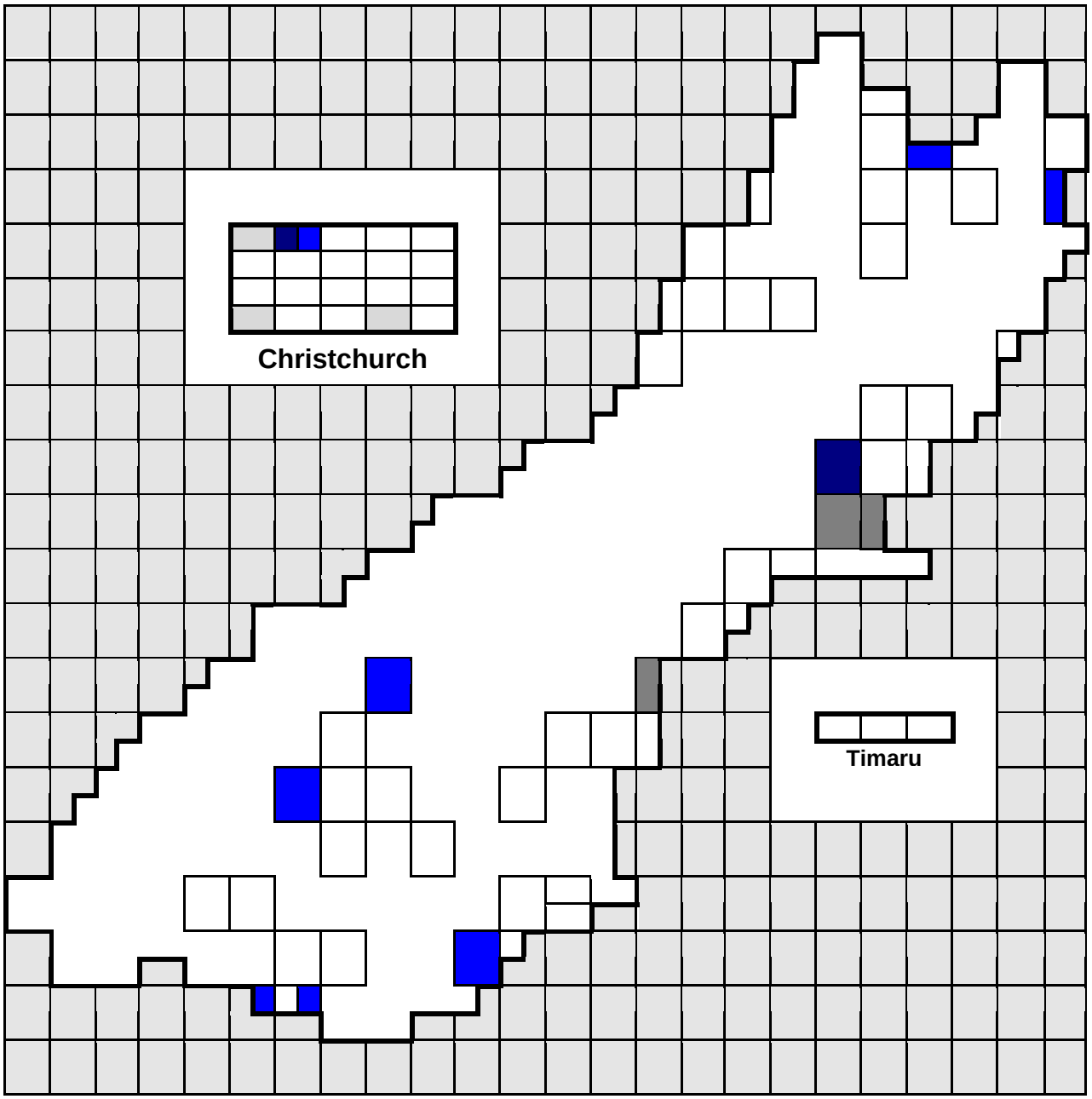
No bags

See urban map insert

Pegs not

Map 2: More Alternatives to *No gives: No returns, White Rabbits*





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.

White rabbits

See urban map insert

No returns

Statistics for Q11: no gives alternatives
Alternatives to *no gives* 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	bagsno11	-1.2242	0.3818	-1.9724	-0.4760	-3.207	0.0013
item	no_ret11	-3.6952	0.7215	-5.1093	-2.2812	-5.122	0.0000
item	nobags11	-1.1773	0.4102	-1.9814	-0.3732	-2.870	0.0041
item	pegsn11	-2.3201	0.6051	-3.5061	-1.1340	-3.834	0.0001
item	whiter11	-3.1783	0.6794	-4.5100	-1.8466	-4.678	0.0000
decile*item	bagsno11	0.0903	0.0582	-0.0238	0.2045	1.5507	0.1210
decile*item	no_ret11	0.2625	0.0945	0.0773	0.4477	2.7785	**0.0055**
decile*item	nobags11	-0.0601	0.0631	-0.1838	0.0636	-.9522	0.3410
decile*item	pegsn11	-0.0568	0.0950	-0.2429	0.1294	-.5976	0.5501
decile*item	whiter11	0.1054	0.0938	-0.0784	0.2892	1.1240	0.2610
scale	0.9940	.	.	.	.	.	

Alternatives to *no gives* by Main Region
Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	bagsno11	1	-0.5878	0.5578	1.1105	0.2920
item	no_ret11	1	-1.2993	0.6513	3.9792	0.0461
item	nobags11	1	-25.3654	0.4249	3563.4662	0.0001
item	pegsn11	1	-25.3653	0.3732	4619.2767	0.0001
item	whiter11	1	-25.3652	0.3962	4099.5797	0.0001
item*region1	bagsno11, 1	1	0.6229	0.6175	1.0175	0.3131
item*region1	bagsno11, 2	1	-0.7668	0.6243	1.5085	0.2194
item*region1	bagsno11, 3	0	0.0000	0.0000	.	.
item*region1	no_ret11, 1	1	-2.0149	0.9708	4.3079	**0.0379**
item*region1	no_ret11, 2	1	-0.3102	0.7187	0.1862	0.6661
item*region1	no_ret11, 3	0	0.0000	0.0000	.	.
item*region1	nobags11, 1	1	24.8264	0.5059	2408.0667	**0.0001**
item*region1	nobags11, 2	0	22.8805	0.0000	.	.
item*region1	nobags11, 3	0	0.0000	0.0000	.	.
item*region1	pegsn11, 1	1	22.0511	0.8108	739.5838	**0.0001**
item*region1	pegsn11, 2	0	23.1963	0.0000	.	.
item*region1	pegsn11, 3	0	0.0000	0.0000	.	.
item*region1	whiter11, 1	1	22.7812	0.6525	1218.8182	**0.0001**
item*region1	whiter11, 2	0	23.0485	0.0000	.	.
item*region1	whiter11, 3	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 -2 for bagsno11	1	13.6985	**0.0002**	LR
1 -2 for no_ret11	1	6.5685	**0.0104**	LR

Alternatives to *no gives* by Sub-Region

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	bagsno11	1	-0.5878	0.5578	1.1105	0.2920
item	no_ret11	1	-1.2993	0.6513	3.9792	0.0461
item	nobags11	1	-26.3656	1.0290	656.5245	0.0001
item	pegsn11	1	-26.3653	1.0541	625.6163	0.0001
item	whiter11	1	-26.3654	0.7500	1235.7986	0.0001
item*region2	bagsno11, 1	1	-0.1054	1.0301	0.0105	0.9185
item*region2	bagsno11, 2	1	0.5878	0.9888	0.3533	0.5522
item*region2	bagsno11, 3	1	0.6931	0.7226	0.9200	0.3375
item*region2	bagsno11, 4	1	0.7419	0.6825	1.1816	0.2770
item*region2	bagsno11, 5	1	-1.0217	0.9545	1.1456	0.2845
item*region2	bagsno11, 6	1	-0.9163	0.7853	1.3615	0.2433
item*region2	bagsno11, 7	1	0.3646	0.8724	0.1747	0.6760
item*region2	bagsno11, 8	1	-25.7775	216811.094	0.0000	0.9999
item*region2	bagsno11, 9	1	-1.4917	0.9347	2.5469	0.1105
item*region2	bagsno11, 10	1	0.1823	0.8531	0.0457	0.8308
item*region2	bagsno11, 11	0	0.0000	0.0000	.	.
item*region2	no_ret11, 1	1	-25.0660	216811.094	0.0000	0.9999
item*region2	no_ret11, 2	1	-0.3102	1.2745	0.0592	0.8077
item*region2	no_ret11, 3	1	-1.5911	1.2165	1.7107	0.1909
item*region2	no_ret11, 4	1	-25.0660	104152.681	0.0000	0.9998
item*region2	no_ret11, 5	1	-0.3102	1.0120	0.0939	0.7593
item*region2	no_ret11, 6	1	0.3185	0.8083	0.1552	0.6936
item*region2	no_ret11, 7	1	0.0465	1.0330	0.0020	0.9641
item*region2	no_ret11, 8	1	-25.0660	216811.094	0.0000	0.9999
item*region2	no_ret11, 9	1	-1.5339	1.2178	1.5865	0.2078
item*region2	no_ret11, 10	1	-0.0870	1.0243	0.0072	0.9323
item*region2	no_ret11, 11	0	0.0000	0.0000	.	.
item*region2	nobags11, 1	1	25.6724	1.3449	364.3659	**0.0001**
item*region2	nobags11, 2	1	25.6724	1.3449	364.3659	**0.0001**
item*region2	nobags11, 3	1	25.8266	1.1336	519.0700	**0.0001**
item*region2	nobags11, 4	1	25.8956	1.1051	549.0606	**0.0001**
item*region2	nobags11, 5	1	0.0003	153308.595	0.0000	1.0000
item*region2	nobags11, 6	1	24.5197	1.2020	416.1288	**0.0001**
item*region2	nobags11, 7	1	25.1128	1.3045	370.6062	**0.0001**
item*region2	nobags11, 8	1	0.0003	216811.094	0.0000	1.0000
item*region2	nobags11, 9	0	23.5324	0.0000	.	.
item*region2	nobags11, 10	1	0.0003	167941.152	0.0000	1.0000

item*region2	nobags11, 11	0	0.0000	0.0000	.	.
item*region2	pegsn11, 1	1	-0.0000	216811.094	0.0000	1.0000
item*region2	pegsn11, 2	1	-0.0000	216811.094	0.0000	1.0000
item*region2	pegsn11, 3	1	-0.0000	121837.317	0.0000	1.0000
item*region2	pegsn11, 4	1	23.8804	1.2856	345.0394	**0.0001**
item*region2	pegsn11, 5	1	26.0288	1.2058	465.9662	**0.0001**
item*region2	pegsn11, 6	1	-0.0000	113225.901	0.0000	1.0000
item*region2	pegsn11, 7	1	-0.0000	177025.517	0.0000	1.0000
item*region2	pegsn11, 8	1	24.7559	1.5202	265.1767	**0.0001**
item*region2	pegsn11, 9	1	23.5321	1.4731	255.1963	**0.0001**
item*region2	pegsn11, 10	0	24.1681	0.0000	.	.
item*region2	pegsn11, 11	0	0.0000	0.0000	.	.
item*region2	whiter11, 1	1	0.0001	216811.094	0.0000	1.0000
item*region2	whiter11, 2	1	24.7560	1.3276	347.7219	**0.0001**
item*region2	whiter11, 3	1	0.0001	121837.317	0.0000	1.0000
item*region2	whiter11, 4	1	24.3286	0.9692	630.1200	**0.0001**
item*region2	whiter11, 5	1	24.7560	1.0782	527.1913	**0.0001**
item*region2	whiter11, 6	1	24.5196	0.9739	633.8787	**0.0001**
item*region2	whiter11, 7	1	0.0001	177025.517	0.0000	1.0000
item*region2	whiter11, 8	1	0.0001	216811.094	0.0000	1.0000
item*region2	whiter11, 9	0	24.2860	0.0000	.	.
item*region2	whiter11, 10	1	0.0001	167941.152	0.0000	1.0000
item*region2	whiter11, 11	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

Alternatives to *no gives* by Island

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	bagsno11	-1.0296	0.3008	-1.6192	-0.4401	-3.423	0.0006
item	no_ret11	-1.8124	0.3813	-2.5598	-1.0650	-4.753	0.0000
item	nobags11	-2.8904	0.5932	-4.0530	-1.7278	-4.873	0.0000
item	pegsn11	-2.8904	0.5932	-4.0530	-1.7278	-4.873	0.0000
item	whiter11	-3.3142	0.7198	-4.7251	-1.9033	-4.604	0.0000
item*island	bagsno11, 1	0.5245	0.3692	-0.1990	1.2481	1.4208	0.1554
item*island	bagsno11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	no_ret11, 1	-0.3039	0.5074	-1.2984	0.6906	-.5989	0.5492
item*island	no_ret11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	nobags11, 1	1.8343	0.6388	0.5824	3.0863	2.8717	**0.0041**
item*island	nobags11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	pegsn11, 1	0.3819	0.7116	-1.0127	1.7766	0.5367	0.5914
item*island	pegsn11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	whiter11, 1	1.0806	0.8007	-0.4888	2.6500	1.3495	0.1772
item*island	whiter11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

Alternatives to *no gives* by Catholic

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	bagsno11	1	-0.5108	0.5164	0.9785	0.3226
item	no_ret11	1	-1.4663	0.6405	5.2410	0.0221
item	nobags11	1	-1.4663	0.6405	5.2410	0.0221
item	pegsn11	1	-1.9459	0.7559	6.6265	0.0100
item	whiter11	1	-24.3653	0.3150	5982.0098	0.0001
item*catholic	bagsno11, 1	1	-0.1709	0.5485	0.0971	0.7554
item*catholic	bagsno11, 2	0	0.0000	0.0000	.	.
item*catholic	no_ret11, 1	1	-0.5792	0.6968	0.6909	0.4058
item*catholic	no_ret11, 2	0	0.0000	0.0000	.	.
item*catholic	nobags11, 1	1	-0.0284	0.6792	0.0018	0.9666
item*catholic	nobags11, 2	0	0.0000	0.0000	.	.
item*catholic	pegsn11, 1	1	-0.7868	0.8394	0.8787	0.3486
item*catholic	pegsn11, 2	0	0.0000	0.0000	.	.
item*catholic	whiter11, 1	0	21.9757	0.0000	.	.
item*catholic	whiter11, 2	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

Alternatives to *no gives* 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	bagsno11	-0.6678	0.2750	-1.2069	-0.1288	-2.428	0.0152
item	no_ret11	-1.7148	0.3621	-2.4245	-1.0051	-4.736	0.0000
item	nobags11	-1.8524	0.3803	-2.5977	-1.1071	-4.871	0.0000
item	pegsn11	-2.9267	0.5926	-4.0882	-1.7652	-4.939	0.0000
item	whiter11	-2.9267	0.5926	-4.0882	-1.7652	-4.939	0.0000
item*urb_rur	bagsno11, 1	0.0437	0.3561	-0.6543	0.7417	0.1226	0.9024
item*urb_rur	bagsno11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	no_ret11, 1	-0.7087	0.5354	-1.7581	0.3406	-1.324	0.1856
item*urb_rur	no_ret11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	nobags11, 1	0.5232	0.4635	-0.3853	1.4318	1.1288	0.2590
item*urb_rur	nobags11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	pegsn11, 1	0.5032	0.7118	-0.8920	1.8984	0.7069	0.4796
item*urb_rur	pegsn11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	whiter11, 1	0.5032	0.7118	-0.8920	1.8984	0.7069	0.4796
item*urb_rur	whiter11 ,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

Alternatives to *no gives* by Decile and Main Region, 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	bagsno11	1	-1.6595	0.7306	5.1590	0.0231
item	no_ret11	1	-2.5790	0.9819	6.8991	0.0086
item	nobags11	1	-25.5502	0.7129	1284.6521	0.0001
item	pegsn11	1	-24.7427	0.8187	913.3742	0.0001
item	whiter11	1	-25.9134	0.9339	769.9996	0.0001
decile*item	bagsno11	1	0.1788	0.0730	5.9899	**0.0144**
decile*item	no_ret11	1	0.2052	0.1080	3.6094	0.0575
decile*item	nobags11	1	0.0315	0.0865	0.1326	0.7158
decile*item	pegsn11	1	-0.1142	0.1254	0.8289	0.3626
decile*item	whiter11	1	0.0908	0.1219	0.5540	0.4567
item*region1	bagsno11, 1	1	0.8201	0.6419	1.6323	0.2014
item*region1	bagsno11, 2	1	-0.9092	0.6434	1.9971	0.1576
item*region1	bagsno11, 3	0	0.0000	0.0000	.	.
item*region1	no_ret11, 1	1	-1.8856	0.9854	3.6618	0.0557
item*region1	no_ret11, 2	1	-0.4438	0.7388	0.3608	0.5480
item*region1	no_ret11, 3	0	0.0000	0.0000	.	.
item*region1	nobags11, 1	1	24.8556	0.5258	2234.9829	**0.0001**
item*region1	nobags11, 2	0	22.8597	0.0000	.	.
item*region1	nobags11, 3	0	0.0000	0.0000	.	.
item*region1	pegsn11, 1	1	21.9465	0.8379	686.0234	**0.0001**
item*region1	pegsn11, 2	0	23.2725	0.0000	.	.
item*region1	pegsn11, 3	0	0.0000	0.0000	.	.
item*region1	whiter11, 1	1	22.8576	0.6773	1138.8473	**0.0001**
item*region1	whiter11, 2	0	22.9897	0.0000	.	.
item*region1	whiter11, 3	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 -2 for no_ret11	1	4.2384	**0.0395**	LR

Alternatives to *no gives* by Main Region excluding Southland-Otago

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	bagsno11	-1.3545	0.2804	-1.9041	-0.8050	-4.831	0.0000
item	no_ret11	-1.6094	0.3038	-2.2049	-1.0140	-5.297	0.0000
item	nobags11	-2.4849	0.4249	-3.3177	-1.6521	-5.848	0.0000
item	pegsn11	-2.1691	0.3732	-2.9005	-1.4376	-5.812	0.0000
item	whiter11	-2.3168	0.3962	-3.0932	-1.5403	-5.848	0.0000
item*region1	bagsno11, 1	1.3896	0.3858	0.6335	2.1458	3.6022	**0.0003**
item*region1	bagsno11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	no_ret11, 1	-1.7047	0.7813	-3.2361	-0.1734	-2.182	**0.0291**
item*region1	no_ret11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	nobags11, 1	1.9459	0.5059	0.9543	2.9375	3.8463	**0.0001**
item*region1	nobags11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	pegsn11, 1	-1.1451	0.8108	-2.7344	0.4441	-1.412	0.1579
item*region1	pegsn11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	whiter11, 1	-0.2672	0.6525	-1.5462	1.0117	-.4095	0.6822
item*region1	whiter11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

Alternatives to *no gives* by Island and Main Region, 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	bagsno11	1	-0.5878	0.5578	1.1105	0.2920
item	no_ret11	1	-1.2993	0.6513	3.9792	0.0461
item	nobags11	1	-25.3657	0.5986	1795.5827	0.0001
item	pegsn11	1	-25.3653	0.5986	1795.5254	0.0001
item	whiter11	1	-25.3654	0.7241	1226.9530	0.0001
item*region1	bagsno11, 1	1	1.0045	0.8443	1.4156	0.2341
item*region1	bagsno11, 2	1	-0.6061	0.6644	0.8323	0.3616
item*region1	bagsno11, 3	0	0.0000	0.0000	.	.
item*region1	no_ret11, 1	1	-2.8267	1.1536	6.0040	**0.0143**
item*region1	no_ret11, 2	1	-0.7289	0.8066	0.8166	0.3662
item*region1	no_ret11, 3	0	0.0000	0.0000	.	.
item*region1	nobags11, 1	1	24.6035	0.6633	1375.8203	**0.0001**
item*region1	nobags11, 2	0	22.7754	0.0000	.	.
item*region1	nobags11, 3	0	0.0000	0.0000	.	.
item*region1	pegsn11, 1	1	21.2526	0.8669	601.0148	**0.0001**
item*region1	pegsn11, 2	0	22.7750	0.0000	.	.
item*region1	pegsn11, 3	0	0.0000	0.0000	.	.
item*region1	whiter11, 1	1	21.5527	0.7087	924.9665	**0.0001**
item*region1	whiter11, 2	0	22.3449	0.0000	.	.
item*region1	whiter11, 3	0	0.0000	0.0000	.	.
item*island	bagsno11, 1	1	-0.3816	0.5757	0.4394	0.5074
item*island	bagsno11, 2	0	0.0000	0.0000	.	.
item*island	no_ret11, 1	1	0.8118	0.6232	1.6968	0.1927
item*island	no_ret11, 2	0	0.0000	0.0000	.	.
item*island	nobags11, 1	1	0.2231	0.8502	0.0689	0.7930
item*island	nobags11, 2	0	0.0000	0.0000	.	.
item*island	pegsn11, 1	1	0.7985	0.7692	1.0777	0.2992
item*island	pegsn11, 2	0	0.0000	0.0000	.	.
item*island	whiter11, 1	1	1.2287	0.8705	1.9923	0.1581
item*island	whiter11, 2	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 -2 for nobags11	1	10.1093	**0.0015**	LR

Alternatives to *no gives* by Main Region and Island excluding Southland-Otago

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	bagsno11	-1.1939	0.3610	-1.9014	-0.4864	-3.307	0.0009
item	no_ret11	-2.0281	0.4757	-2.9606	-1.0957	-4.263	0.0000
item	nobags11	-2.5903	0.5986	-3.7635	-1.4170	-4.327	0.0000
item	pegsn11	-2.5903	0.5986	-3.7635	-1.4170	-4.327	0.0000
item	whiter11	-3.0204	0.7241	-4.4397	-1.6011	-4.171	0.0000
item*reg1	bagsno11, 1	1.6106	0.5209	0.5897	2.6316	3.0920	**0.0020**
item*reg1	bagsno11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*reg1	no_ret11, 1	-2.0978	0.8248	-3.7143	-0.4813	-2.544	**0.0110**
item*reg1	no_ret11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*reg1	nobags11, 1	1.8281	0.6633	0.5281	3.1282	2.7561	**0.0059**
item*reg1	nobags11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*reg1	pegsn11, 1	-1.5224	0.8669	-3.2215	0.1767	-1.756	0.0791
item*reg1	pegsn11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*reg1	whiter11, 1	-0.7922	0.7087	-2.1812	0.5967	-1.118	0.2636
item*reg1	whiter11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*is	bagsno11, 1	-0.3816	0.5757	-1.5100	0.7468	-.6628	0.5074
item*is	bagsno11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*is	no_ret11, 1	0.8118	0.6232	-0.4097	2.0332	1.3026	0.1927
item*is	no_ret11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*is	nobags11, 1	0.2231	0.8502	-1.4433	1.8896	0.2624	0.7930
item*is	nobags11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*is	pegsn11, 1	0.7985	0.7692	-0.7091	2.3061	1.0381	0.2992
item*is	pegsn11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*is	whiter11, 1	1.2287	0.8705	-0.4774	2.9348	1.4115	0.1581
item*is	whiter11, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	