

Appendix B: Regression coefficients of all models

Quality of care

Generalized Ordered Logit Estimates

Number of obs = 7011

LR chi2(32) = 780.71

Prob > chi2 = 0.0000

Log likelihood = -4488.0679

Pseudo R2 = 0.0800

care_qual		Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
1	ordsec						
	1	3.617589	1.428839	3.26	0.001	1.668092	7.845458
	2	1.551432	.4831747	1.41	0.158	.8426293	2.856467
	old	.8780931	.6184372	-0.18	0.854	.2208223	3.49171
	age	1.028746	.0304255	0.96	0.338	.9708085	1.090141
	active_dum	2.48884	1.924425	1.18	0.238	.5468014	11.32829
	child_care	2.623745	2.894489	0.87	0.382	.3019149	22.80125
	NumberStaff	.995739	.0018954	-2.24	0.025	.992031	.9994608
	children	.6277419	.4902933	-0.60	0.551	.1358177	2.901389
	housingsupport_dummy	1.880857	2.604932	0.46	0.648	.1245852	28.39521
	supportservice_dummy	1.504408	2.062675	0.30	0.766	.1023986	22.10228
	carehome_dummy	1.068072	1.268826	0.06	0.956	.1040897	10.95956
	school_dum	851636.5	4.49e+08	0.03	0.979	0	.
	dementia	1.114056	.5725881	0.21	0.834	.4068344	3.050679
	grade_change						
	1	.0489929	.0127279	-11.61	0.000	.0294441	.0815205
	2	2.36307	2.406158	0.84	0.398	.3211843	17.38597

	3		.2890156	.1719283	-2.09	0.037	.0900663	.9274282
	_cons		25.09901	39.60822	2.04	0.041	1.138657	553.2483

2								
	ordsec							
	1		1.664025	.12034	7.04	0.000	1.444116	1.917421
	2		1.474978	.1036209	5.53	0.000	1.285246	1.692718
	old		.4318115	.0844141	-4.30	0.000	.2943705	.6334234
	age		1.044373	.0066945	6.77	0.000	1.031334	1.057577
	active_dum		1.493337	.3504736	1.71	0.088	.9427313	2.365525
	child_care		1.051557	.4380482	0.12	0.904	.4647795	2.379133
	NumberStaff		.9930645	.001156	-5.98	0.000	.9908014	.9953327
	children		.8973683	.2032698	-0.48	0.633	.57565	1.398888
	housingsupport_dummy		1.969249	.9435612	1.41	0.157	.7699263	5.036768
	supportservice_dummy		1.364967	.6511649	0.65	0.514	.5358607	3.476902
	carehome_dummy		1.744381	.7734211	1.25	0.210	.731538	4.159545
	school_dum		5.737416	3.398512	2.95	0.003	1.796859	18.31972
	dementia		.8022336	.1385563	-1.28	0.202	.5718567	1.12542
	grade_change							
	1		.1674335	.0228994	-13.07	0.000	.1280637	.2189066
	2		.4715262	.0558757	-6.34	0.000	.3737996	.5948027
	3		.4293874	.0878028	-4.13	0.000	.2876023	.6410711
	_cons		.6165617	.3297748	-0.90	0.366	.2161235	1.75894

Quality of staff

Generalized Ordered Logit Estimates

Number of obs = 7007
LR chi2(32) = 624.53
Prob > chi2 = 0.0000
Pseudo R2 = 0.0614

Log likelihood = -4770.4883

	qual_staff	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
1						
	ordsec					
	1	1.56036	.4134778	3.77	0.000	.7499584 2.370762
	2	.3584772	.2820603	1.27	0.204	-.1943509 .9113053
	old	.5366185	.6639625	0.81	0.419	-.7647241 1.837961
	age	.0481668	.0275312	1.75	0.080	-.0057935 .102127
	active_dum	.7248618	.7649833	0.95	0.343	-.774478 2.224201
	child_care	-13.48848	979.7484	-0.01	0.989	-1933.76 1906.783
	NumberStaff	-.0020215	.0029408	-0.69	0.492	-.0077853 .0037423
	children	-.160296	.7128734	-0.22	0.822	-1.557502 1.23691
	housingsupport_dummy	-13.45075	979.7487	-0.01	0.989	-1933.723 1906.821
	supportservice_dummy	-13.52538	979.7487	-0.01	0.989	-1933.797 1906.747
	carehome_dummy	-14.13483	979.7485	-0.01	0.988	-1934.407 1906.137
	school_dum	.3588927	1414.548	0.00	1.000	-2772.104 2772.822
	dementia	-.2628266	.565618	-0.46	0.642	-1.371418 .8457644
	grade_change					
	1	-2.916905	.2552869	-11.43	0.000	-3.417259 -2.416552
	2	.979674	1.015763	0.96	0.335	-1.011185 2.970533
	3	-1.636685	.4557055	-3.59	0.000	-2.529851 -.7435185
	_cons	17.01345	979.749	0.02	0.986	-1903.259 1937.286

2

ordsec							
1	.603499	.0700092	8.62	0.000	.4662834	.7407145	
2	.3371037	.0674661	5.00	0.000	.2048725	.4693349	
old	-.5826408	.1830049	-3.18	0.001	-.9413237	-.2239579	
age	.0536388	.0061904	8.66	0.000	.0415058	.0657718	
active_dum	.2471304	.2330696	1.06	0.289	-.2096777	.7039385	
child_care	-.3758204	.4148514	-0.91	0.365	-1.188914	.4372735	
NumberStaff	-.0030292	.0010036	-3.02	0.003	-.0049962	-.0010622	
children	.0370988	.2109649	0.18	0.860	-.3763847	.4505824	
housingsupport_dummy	.1782639	.4693637	0.38	0.704	-.7416721	1.0982	
supportservice_dummy	-.1462852	.467938	-0.31	0.755	-1.063427	.7708564	
carehome_dummy	-.0176229	.4392484	-0.04	0.968	-.878534	.8432882	
school_dum	1.08317	.5621073	1.93	0.054	-.0185406	2.18488	
dementia	-.0575563	.1702268	-0.34	0.735	-.3911947	.2760821	
grade_change							
1	-.9503409	.1239546	-7.67	0.000	-1.193287	-.7073945	
2	-.5843002	.1182296	-4.94	0.000	-.8160259	-.3525746	
3	-.71315	.2131844	-3.35	0.001	-1.130984	-.2953163	
_cons	-.437402	.5261457	-0.83	0.406	-1.468629	.5938247	

Quality of management

Generalized Ordered Logit Estimates

Number of obs = 7004

LR chi2(32) = 541.98

Prob > chi2 = 0.0000

Pseudo R2 = 0.0504

Log likelihood = -5104.49

	qual_man	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
1						
	ordsec					
	1	1.470659	.3196049	4.60	0.000	.844245 2.097073
	2	.3702209	.2313883	1.60	0.110	-.0832919 .8237337
	old	.0011429	.6155718	0.00	0.999	-1.205356 1.207641
	age	.0451738	.0224192	2.01	0.044	.0012329 .0891148
	active_dum	.2447983	.7620621	0.32	0.748	-1.248816 1.738413
	child_care	-.046742	1.074729	-0.04	0.965	-2.153172 2.059688
	NumberStaff	-.0039073	.0016931	-2.31	0.021	-.0072257 -.0005888
	children	.3135191	.7891894	0.40	0.691	-1.233264 1.860302
	housingsupport_dummy	1.124893	1.36565	0.82	0.410	-1.551732 3.801519
	supportservice_dummy	.5467217	1.345445	0.41	0.684	-2.090301 3.183745
	carehome_dummy	.4720122	1.2185	0.39	0.698	-1.916204 2.860228
	school_dum	13.83781	756.2878	0.02	0.985	-1468.459 1496.135
	dementia	-.6698529	.4359013	-1.54	0.124	-1.524204 .184498
	grade_change					
	1	-2.853141	.2080409	-13.71	0.000	-3.260893 -2.445388
	2	1.541346	1.010538	1.53	0.127	-.4392712 3.521963
	3	-1.23886	.4276384	-2.90	0.004	-2.077015 -.4007037
	_cons	2.950242	1.550329	1.90	0.057	-.0883464 5.98883

2

ordsec							
1	.4680099	.0685499	6.83	0.000	.3336545	.6023652	
2	.3212412	.0668904	4.80	0.000	.1901384	.4523439	
old	-.4003983	.1786427	-2.24	0.025	-.7505316	-.0502649	
age	.039026	.006131	6.37	0.000	.0270095	.0510426	
active_dum	.0486828	.2304928	0.21	0.833	-.4030748	.5004405	
child_care	-.2583895	.4025476	-0.64	0.521	-1.047368	.5305893	
NumberStaff	-.0022101	.0009563	-2.31	0.021	-.0040843	-.0003358	
children	-.0134476	.2039318	-0.07	0.947	-.4131467	.3862514	
housingsupport_dummy	.2675281	.454912	0.59	0.556	-.6240831	1.159139	
supportservice_dummy	.0252316	.4536396	0.06	0.956	-.8638856	.9143488	
carehome_dummy	.1925452	.4258836	0.45	0.651	-.6421713	1.027262	
school_dum	1.386507	.5425234	2.56	0.011	.3231803	2.449833	
dementia	-.2726418	.1709459	-1.59	0.111	-.6076896	.062406	
grade_change							
1	-1.015192	.1294059	-7.85	0.000	-1.268823	-.7615612	
2	-.4255027	.1177498	-3.61	0.000	-.6562881	-.1947173	
3	-.883682	.2270271	-3.89	0.000	-1.328647	-.4387171	
_cons	-.4740285	.5122829	-0.93	0.355	-1.478085	.5300276	

Quality of environment

Generalized Ordered Logit Estimates

Number of obs = 5099
LR chi2(32) = 349.14
Prob > chi2 = 0.0000
Pseudo R2 = 0.0474

Log likelihood = -3510.4682

qual_environ	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
1					
ordsec					
1	.5119585	.4793881	1.07	0.286	-.427625 1.451542
2	-.0497575	.4368961	-0.11	0.909	-.9060582 .8065432
old	.3204709	.7762581	0.41	0.680	-1.200967 1.841909
age	.0915891	.0367722	2.49	0.013	.0195169 .1636614
active_dum	1.517168	.7982178	1.90	0.057	-.0473103 3.081646
child_care	-14.90339	3694.648	-0.00	0.997	-7256.279 7226.473
NumberStaff	-.0099754	.0104203	-0.96	0.338	-.0303988 .0104479
children	1.376886	1.201762	1.15	0.252	-.9785241 3.732296
housingsupport_dummy	1.523753	9488.146	0.00	1.000	-18594.9 18597.95
supportservice_dummy	-12.95929	3694.648	-0.00	0.997	-7254.336 7228.418
carehome_dummy	-14.4477	3694.648	-0.00	0.997	-7255.824 7226.929
school_dum	-.0511016	4186.933	-0.00	1.000	-8206.289 8206.186
dementia	-.2397758	.5573478	-0.43	0.667	-1.332157 .8526057
grade_change					
1	-2.743418	.3475525	-7.89	0.000	-3.424608 -2.062228
2	13.85418	638.2597	0.02	0.983	-1237.112 1264.82
3	-.830322	.8086726	-1.03	0.305	-2.415291 .7546473
_cons	16.47663	3694.648	0.00	0.996	-7224.9 7257.854

2

ordsec							
1	.4650903	.0790323	5.88	0.000	.3101898	.6199908	
2	.137697	.083688	1.65	0.100	-.0263284	.3017224	
old	-.8593083	.1876587	-4.58	0.000	-1.227113	-.491504	
age	.0232359	.0074236	3.13	0.002	.0086859	.0377859	
active_dum	.0814776	.2641571	0.31	0.758	-.4362607	.5992159	
child_care	1.229794	1.166721	1.05	0.292	-1.056938	3.516526	
NumberStaff	.0032956	.0023765	1.39	0.166	-.0013622	.0079534	
children	-.1186919	.2098222	-0.57	0.572	-.529936	.2925521	
housingsupport_dummy	1.924667	1.658254	1.16	0.246	-1.325452	5.174786	
supportservice_dummy	1.382002	1.189131	1.16	0.245	-.9486524	3.712656	
carehome_dummy	1.551178	1.173367	1.32	0.186	-.74858	3.850936	
school_dum	1.690782	1.19893	1.41	0.158	-.659078	4.040643	
dementia	-.5361241	.1735847	-3.09	0.002	-.8763439	-.1959043	
grade_change							
1	-.6237244	.1458968	-4.28	0.000	-.9096768	-.337772	
2	-.7660555	.1443506	-5.31	0.000	-1.048977	-.4831336	
3	-1.036217	.2742086	-3.78	0.000	-1.573656	-.4987783	
_cons	-1.372131	1.221586	-1.12	0.261	-3.766395	1.022134	

Risk of services

Generalized Ordered Logit Estimates

Number of obs = 7335

LR chi2(32) = 911.79

Prob > chi2 = 0.0000

Pseudo R2 = 0.1229

Log likelihood = -3254.8951

	risk	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
1	ordsec						
	1	-1.049211	.1077008	-9.74	0.000	-1.260301	-.8381213
	2	-.583443	.090511	-6.45	0.000	-.7608414	-.4060447
	old	.4334521	.2110812	2.05	0.040	.0197407	.8471636
	age	-.0180398	.0085729	-2.10	0.035	-.0348424	-.0012372
	active_dum	-.1379858	.3148894	-0.44	0.661	-.7551577	.4791861
	child_care	.0672593	.6344598	0.11	0.916	-1.176259	1.310778
	NumberStaff	.0080025	.0011696	6.84	0.000	.0057101	.010295
	children	-.1438598	.2614877	-0.55	0.582	-.6563663	.3686468
	housingsupport_dummy	.570841	.6888947	0.83	0.407	-.7793678	1.92105
	supportservice_dummy	.7807085	.6873573	1.14	0.256	-.566487	2.127904
	carehome_dummy	.8119581	.6585732	1.23	0.218	-.4788216	2.102738
	school_dum	.6128083	.7412761	0.83	0.408	-.8400661	2.065683
	dementia	.2299525	.1744474	1.32	0.187	-.1119582	.5718632
	grade_change						
	1	1.706355	.1309808	13.03	0.000	1.449637	1.963073
	2	.9717695	.1359324	7.15	0.000	.705347	1.238192
	3	-.2449884	.1618032	-1.51	0.130	-.5621169	.0721401
	_cons	-1.758925	.7606758	-2.31	0.021	-3.249822	-.2680273

2

ordsec							
1	-1.381424	.2028329	-6.81	0.000	-1.778969	-.9838786	
2	-.490703	.1479122	-3.32	0.001	-.7806057	-.2008003	
old	.4614046	.3090323	1.49	0.135	-.1442876	1.067097	
age	-.03324	.0137416	-2.42	0.016	-.060173	-.0063069	
active_dum	-.5714107	.3997949	-1.43	0.153	-1.354994	.2121729	
child_care	-.2703299	1.034473	-0.26	0.794	-2.29786	1.7572	
NumberStaff	.0045122	.0013453	3.35	0.001	.0018755	.0071489	
children	.1349647	.3912695	0.34	0.730	-.6319094	.9018388	
housingsupport_dummy	.4661248	1.109885	0.42	0.675	-1.70921	2.641459	
supportservice_dummy	.6176765	1.108475	0.56	0.577	-1.554895	2.790248	
carehome_dummy	.953676	1.06416	0.90	0.370	-1.13204	3.039392	
school_dum	.962504	1.138753	0.85	0.398	-1.269412	3.19442	
dementia	.386295	.2186784	1.77	0.077	-.0423069	.8148968	
grade_change							
1	1.873533	.1616649	11.59	0.000	1.556675	2.19039	
2	.882429	.1991498	4.43	0.000	.4921026	1.272755	
3	-.3510296	.2654135	-1.32	0.186	-.8712306	.1691714	
_cons	-2.455577	1.192812	-2.06	0.040	-4.793446	-.1177072	

Complaints

Logistic regression

Number of obs = 7358

LR chi2(16) = 1216.61

Prob > chi2 = 0.0000

Pseudo R2 = 0.2081

Log likelihood = -2314.3752

complain_dum	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	

ordsec						
1	.1827634	.0211099	-14.71	0.000	.1457376 .2291957	
2	.2957996	.0295132	-12.21	0.000	.2432594 .3596876	
old	2.79912	.6581929	4.38	0.000	1.7655 4.437879	
age	1.000432	.0090009	0.05	0.962	.9829453 1.01823	
active_dum	.9815351	.3415745	-0.05	0.957	.4962351 1.941441	
child_care	4.37012	4.519341	1.43	0.154	.5757406 33.1711	
NumberStaff	1.014777	.0013417	11.09	0.000	1.012151 1.01741	
children	.4217847	.1519222	-2.40	0.017	.208208 .854445	
housingsupport_dummy	2.05948	2.260325	0.66	0.510	.2396322 17.69987	
supportservice_dummy	2.314599	2.539536	0.76	0.444	.2694963 19.87919	
carehome_dummy	2.485428	2.666338	0.85	0.396	.3035585 20.3498	
school_dum	6.472596	7.120815	1.70	0.090	.7492569 55.91474	
dementia	1.207942	.2133104	1.07	0.285	.8545399 1.707496	
grade_change						
1	2.211787	.337599	5.20	0.000	1.639906 2.983098	
2	2.590119	.3731485	6.61	0.000	1.952946 3.435176	
3	.1189318	.033487	-7.56	0.000	.0684904 .2065219	
_cons	.105057	.1212316	-1.95	0.051	.0109439 1.008505	

Requirements

Logistic regression

Number of obs = 6320

LR chi2(16) = 755.05

Prob > chi2 = 0.0000

Pseudo R2 = 0.1145

Log likelihood = -2920.0863

requirement_dum	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]
ordsec					
1	.4935881	.0456649	-7.63	0.000	.4117321 .5917178
2	.7069104	.0608671	-4.03	0.000	.5971361 .8368649
old	2.628148	.5195157	4.89	0.000	1.783979 3.871774
age	.9730691	.0076567	-3.47	0.001	.9581774 .9881924
active_dum	1.113632	.3601256	0.33	0.739	.5908544 2.098953
child_care	1.228315	.6878283	0.37	0.713	.4098795 3.680977
NumberStaff	1.009016	.0012177	7.44	0.000	1.006632 1.011406
children	.8969939	.2154522	-0.45	0.651	.5601912 1.436292
housingsupport_dummy	1.487114	.9103079	0.65	0.517	.4480202 4.936177
supportservice_dummy	1.201242	.7388358	0.30	0.766	.3598244 4.010241
carehome_dummy	1.695957	.9899672	0.90	0.365	.5401942 5.324512
school_dum	1.13933	.7635617	0.19	0.846	.3063283 4.237522
dementia	1.229638	.2092639	1.21	0.224	.8808808 1.716476
grade_change					
1	1.335123	.1949419	1.98	0.048	1.002853 1.777484
2	3.674331	.4758097	10.05	0.000	2.8507 4.735929
3	.8678449	.1995073	-0.62	0.538	.5530457 1.361831
_cons	.2478778	.1725359	-2.00	0.045	.0633515 .9698805