



Modelling changes in employer satisfaction between 2005, 2007 and 2009

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NATIONAL CENTRE FOR
VOCATIONAL EDUCATION RESEARCH

FOR CLARITY IN FIGURES, PLEASE PRINT IN COLOUR

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Modelling changes in employer satisfaction between 2005, 2007 and 2009

David Roberts, NCVER

Employer satisfaction is measured using the Survey of Employer Use and Views of the VET System every two years. Key measures from the survey are employer satisfaction with: vocational qualifications as a job requirement; apprentices and trainees; and nationally recognised training.

Arguably, the most important area of focus is the change in employer satisfaction across years. An issue with measuring change is that the sampling errors are quite large and it is not always obvious what constitutes a real change in the level of employer satisfaction. To get a clearer view, this paper models the change in satisfaction, taking into account the size and industry of the responding employers. We wish to identify 'real' shifts in satisfaction, as distinct from shifts that occur because of changes in the nature of the sample.

The analysis focuses on changes in employer satisfaction at the state and territory level.

Key messages

In terms of the model-based estimates:

- ✧ South Australia saw a significant increase in employer satisfaction with vocational qualifications as a job requirement between 2005 and 2009.
- ✧ New South Wales, Tasmania and the Australian Capital Territory saw a significant increase in employer satisfaction with apprentices and trainees between 2005 and 2009.
- ✧ New South Wales, South Australia, Western Australia and the Northern Territory saw a significant increase in employer satisfaction with nationally recognised training between 2005 and 2009.

Tom Karmel
Managing Director, NCVER

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Background

The Survey of Employer Use and Views of the VET System was developed to measure the performance of the vocational education and training (VET) sector. Conducted biennially since 2005, the survey measures employers' use of and satisfaction with VET in meeting their skill needs.

All organisations in Australia with at least one employee are in the scope of the survey, with employers randomly selected and stratified by:

- ✧ state (eight states and territories)
- ✧ industry (17 Australian and New Zealand Standard Industrial Classification [ANZSIC 1993] divisions)
- ✧ employer size (small = 1–9 employees, medium = 10–99 employees, large = 100 or more employees).

Key measures from the survey include employer satisfaction with: vocational qualifications as a job requirement, apprentices and trainees, and nationally recognised training. When the results of the three survey years are compared, large differences in employer satisfaction are observed in some states and territories (table 1), noting that standard errors are also large. See also appendix A. For example, satisfaction with vocational qualifications as a job requirement increased by 15.1 percentage points in Western Australia between 2007 and 2009.

Table 1 Employers who are satisfied^a with training as a way of meeting skill needs by type of engagement with training, 2005 and 2007 (%)

State (Base: all employers within state)	Employers with vocational qualifications as a job requirement			Employers with apprentices/trainees			Employers providing nationally recognised training ^b		
	2005	2007	2009	2005	2007	2009	2005	2007	2009
NSW	77.1	80.7	81.3	73.7	87.1	78.8	79.4	74.2	82.5
Vic.	77.7	85.4	84.5	84.0	82.3	86.5	86.3	82.0	88.2
Qld	73.2	76.2	83.6	81.3	83.9	83.6	70.9	87.7	83.4
SA	70.1	88.4	85.2	82.4	81.7	89.0	80.2	88.2	87.8
WA	83.8	72.1	87.2	80.4	70.4	83.0	84.7	81.9	95.5
Tas.	81.4	85.5	86.9	80.2	89.6	87.1	82.8	83.7	84.6
NT	67.7	76.8	83.9	84.2	82.7	77.5	74.4	73.9	91.7
ACT	77.5	84.4	79.6	69.9	81.8	84.8	83.2	83.9	79.5

Notes: a 'Satisfied' was rated as either satisfied or very satisfied.

b Nationally recognised training is defined as nationally recognised training other than as part of an apprenticeship or traineeship. For the purposes of this survey, apprenticeships and traineeships are reported separately.

Source: NCVET (2009).

This paper uses a model-based approach to determine whether the differences in employer satisfaction between years are real or related to other factors, such as the distribution of responding businesses by size and industry.

Methodology

This paper replicates the approach used by Brooks and Awodeyi (2008) in examining differences in employer satisfaction between 2005 and 2007, with a slight modification, in that we estimate baseline employer satisfaction using aggregated data across the three years under consideration.

For each aspect of the VET system (employers with vocational qualifications as a job requirement, employers with apprentices/trainees, and employers providing nationally recognised training) and each state, we ran a logistic regression model using Statistical Analysis System (SAS). Employer satisfaction was the dependent variable, year was the explanatory variable, with industry by size, the control variable. An employer being satisfied was coded as a 1.

Using estimates for the coefficients from the regression models, we can model the probability (for each aspect in each state) that an employer is satisfied with the VET system in 2005, 2007 and 2009. Moreover, the regression enables us to see what variables contribute significantly to the difference in satisfaction levels between years.

Model estimates for each year (2005, 2007 and 2009) were calculated using the following method. Let p_t be the proportion of satisfied employers (survey estimate) at time t , where $t = 2005, 2007, 2009$.

The logistic regression model is:

$$\ln\left(\frac{p_t}{1-p_t}\right) = \alpha + \delta_{2005}\tau_{2005} + \delta_{2007}\tau_{2007} + \boldsymbol{\beta}'\mathbf{x} \quad (1)$$

where

- ✧ $(\tau_{2005}, \tau_{2007}) = (0,0)$ when $t = 2009$,
- ✧ $(\tau_{2005}, \tau_{2007}) = (1,0)$ when $t = 2005$,
- ✧ $(\tau_{2005}, \tau_{2007}) = (0,1)$ when $t = 2007$,

with δ_{2005} and δ_{2007} the corresponding coefficients. The vector \mathbf{x} contains the (binary) control variables (industry by size of business), the vector $\boldsymbol{\beta}$ contains the corresponding coefficients and $\hat{\alpha}$ is the intercept.

To get values for the overall satisfaction for a given state, aspect and year, we need to get a numerical value for the term $\boldsymbol{\beta}'\mathbf{x}$. This is achieved by substituting for each component of \mathbf{x} the proportion of the population of the corresponding set of employers, averaged over the three years. The survey estimates are based on a sample that changes over time, so all respondents from the three years are included in calculating this average in order to improve the overall model.

Noting that when $(\tau_{2005}, \tau_{2007}) = (0,0)$ i.e. $t = 2009$,

$$\ln\left(\frac{p_{2009}}{1-p_{2009}}\right) = \alpha + \boldsymbol{\beta}'\mathbf{x} \quad (2)$$

So the model estimates p_{2005}, p_{2007} are obtained by substituting (2) into (1). That is;

$$\ln\left(\frac{p_t}{1-p_t}\right) = \ln\left(\frac{p_{2009}}{1-p_{2009}}\right) + \delta_{2005}\tau_{2005} + \delta_{2007}\tau_{2007} \quad (3)$$

for $t = 2005, 2007$. Hence,

$$\frac{p_t}{1 - p_t} = \left(\frac{p_{2009}}{1 - p_{2009}} \right) e^{\delta_t}, \quad t=2005, 2007$$

and so we have

$$p_{2005} = \frac{p_{2009} e^{\delta_{2005}}}{1 - p_{2009} (1 - e^{\delta_{2005}})}$$

and

$$p_{2007} = \frac{p_{2009} e^{\delta_{2007}}}{1 - p_{2009} (1 - e^{\delta_{2007}})} .$$

Results

The results of the satisfaction models are shown below for each of the three aspects of the VET system under consideration. Detailed results of the logistic regressions are in appendix B.

By controlling for the interaction between industry and size, more differences are statistically significant between modelled estimates of employer satisfaction than between survey estimates (tables B1 and B2). For example, for satisfaction with vocational qualifications as a job requirement in Victoria, the difference between 2007 and 2009 is significantly different in the model, but not in the survey estimates. In a model of satisfaction, only variation due to the variables under consideration is included. This leads to more results being statistically significant than observed in survey estimates.

Tables 2, 3 and 4 show the model estimates for employer satisfaction in 2005, 2007 and 2009. Statistically significant differences in modelled estimates of satisfaction are shaded, based on the results of logistic regressions. Significant contributors to the differences in employer satisfaction are identified further in appendix B. Footnotes indicate a statistically significant difference in survey estimates. For example, in Western Australia differences in satisfaction with nationally recognised training were statistically significant in both the modelled and survey estimates between 2005 and 2009.

Modelled estimates of employer satisfaction are compared with survey estimates in figures 1 to 3. The figures show that the modelled estimates are generally similar to, although smoother than, the survey estimates, in particular for those states and territories in which large differences in satisfaction were observed in the survey between years. This is reflected in the typically small pseudo-R² values for the regression models (see appendix C), telling us that the variation observed in the survey estimates results from factors other than employer size and industry.

The apparent difference in employer satisfaction levels in the modelled proportions relative to the survey proportions arises from the small differences between years in modelled proportions. This is apparent in figures 1 to 3 where satisfaction levels are generally flatter for modelled proportions than survey proportions. In some cases, this leads to a higher modelled proportion of satisfaction than the corresponding survey proportion. This highlights the fact that it is the difference in modelled satisfaction that is important, rather than the absolute percentages.

Table 2 Model estimates of employer satisfaction with vocational qualifications as a job requirement

State	Model estimates			Percentage point differences between model estimates	
	2005 %	2007 %	2009 %	2005 vs 2009 %	2007 vs 2009 %
NSW	80.5	82.1	82.9	2.4	0.7
Vic.	84.4	83.0	88.2	3.8	5.1
Qld	77.3	78.1	83.2	5.9	5.1
SA	83.1	88.3	90.6	7.5 ^a	2.3
WA	88.2	80.1	88.4	0.2	8.2 ^a
Tas.	80.7	87.6	87.4	6.7	-0.3
NT	78.6	82.0	85.4	6.9 ^a	3.5
ACT	75.9	83.3	82.6	6.7	-0.7

Notes: Shading indicates significant differences in modelled satisfaction levels at the 95% confidence level (see table B1).

a The corresponding difference in survey estimates is statistically significant at the 95% confidence level (see tables A1 and A2).

Table 3 Model estimates of employer satisfaction with apprentices/trainees

State	Model estimates			Percentage point differences between modelled estimates	
	2005 %	2007 %	2009 %	2005 vs 2009 %	2007 vs 2009 %
NSW	74.1	85.2	85.2	11.1	0.0
Vic.	90.1	90.9	91.2	1.1	0.3
Qld	83.7	84.3	84.4	0.7	0.2
SA	88.7	91.4	91.9	3.2	0.5
WA	85.2	78.3	86.2	1.0	7.9 ^a
Tas.	85.3	92.0	91.3	6.0	-0.8
NT	91.7	89.3	87.7	-4.0	-1.6
ACT	76.9	87.9	89.1	12.2 ^a	1.3

Notes: Shading indicates significant differences in modelled satisfaction levels at the 95% confidence level (see table B2).

a The corresponding difference in survey estimates is statistically significant at the 95% confidence level (see tables A1 and A2).

Table 4 Model estimates of employer satisfaction with nationally recognised training

State	Model estimates			Percentage point differences between modelled estimates	
	2005 %	2007 %	2009 %	2005 vs 2009 %	2007 vs 2009 %
NSW	80.9	82.8	89.0	8.1	6.2
Vic.	85.1	85.9	89.0	3.9	3.1
Qld	94.3	95.4	96.2	1.9	0.8
SA	85.1	90.1	92.4	7.2	2.2
WA	82.1	84.9	94.7	12.7 ^a	9.8 ^a
Tas.	85.3	89.3	90.3	4.9	1.0
NT	90.2	88.6	94.9	4.7 ^a	6.3 ^a
ACT	90.4	92.2	91.5	1.2	-0.6

Notes: Shading indicates significant differences in modelled satisfaction levels at the 95% confidence level (see table B3).

a The corresponding difference in survey estimates is statistically significant at the 95% confidence level (see tables A1 and A2).

Figure 1 Comparison of modelled predictions with survey estimates of employer satisfaction with vocational qualifications

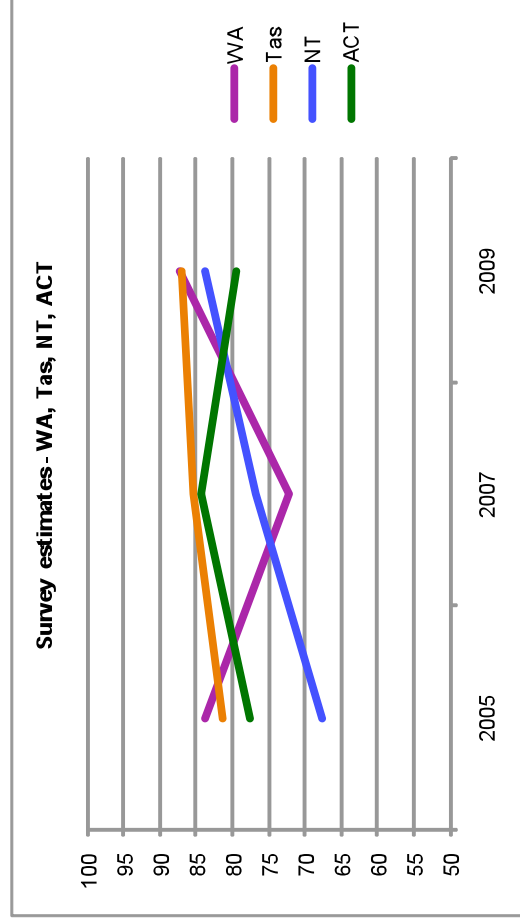
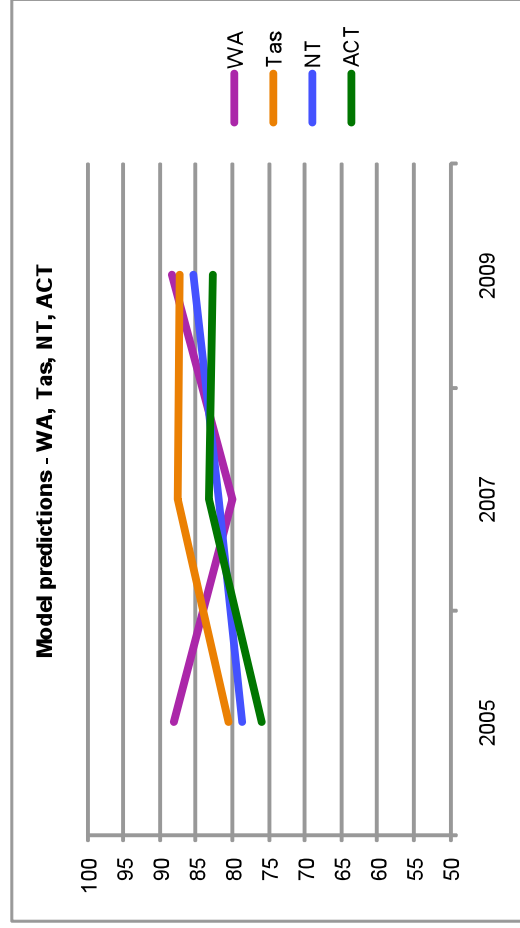
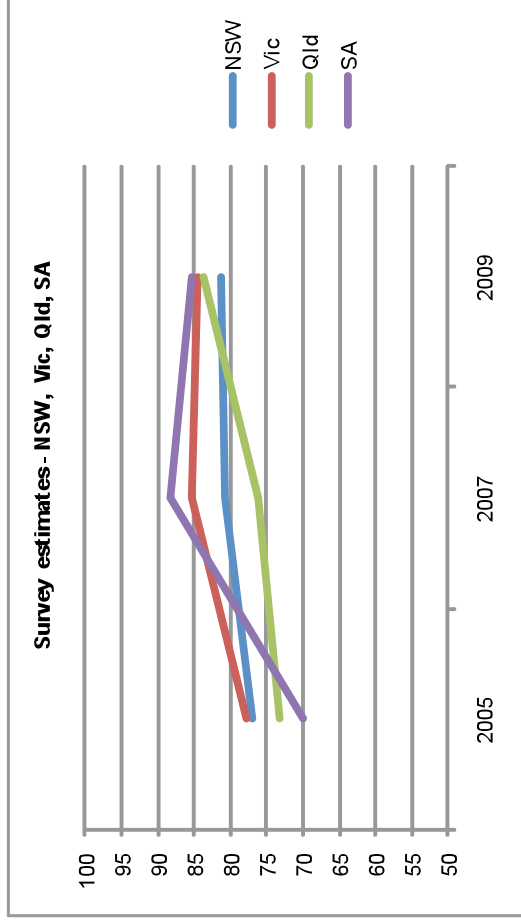
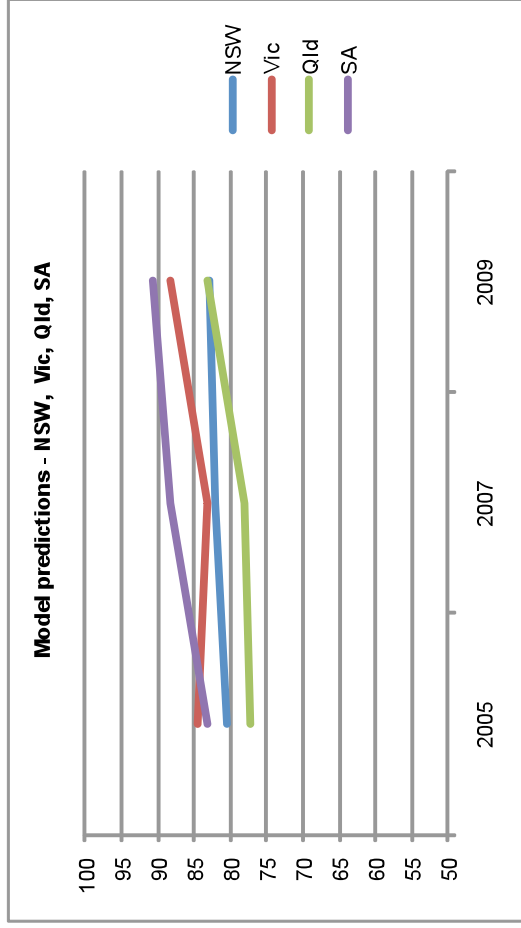


Figure 2 Comparison of modelled predictions with survey estimates of employer satisfaction with apprentices and trainees

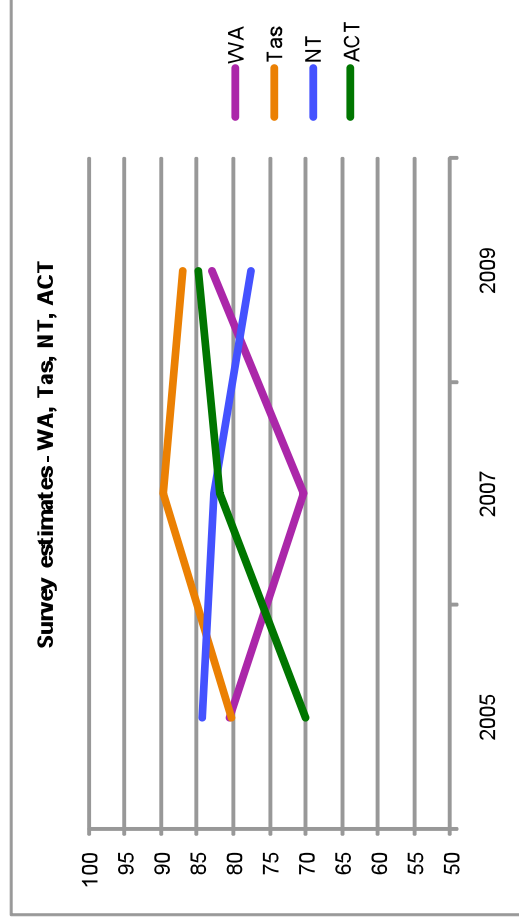
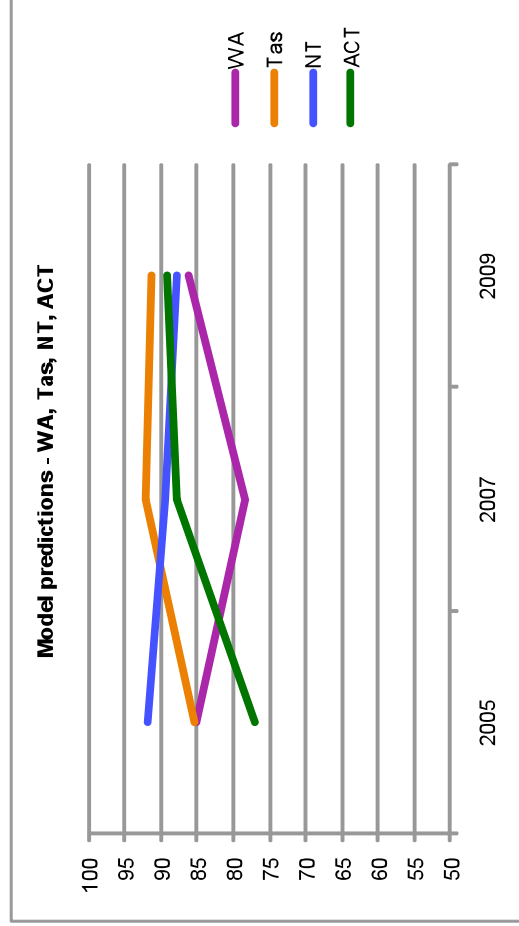
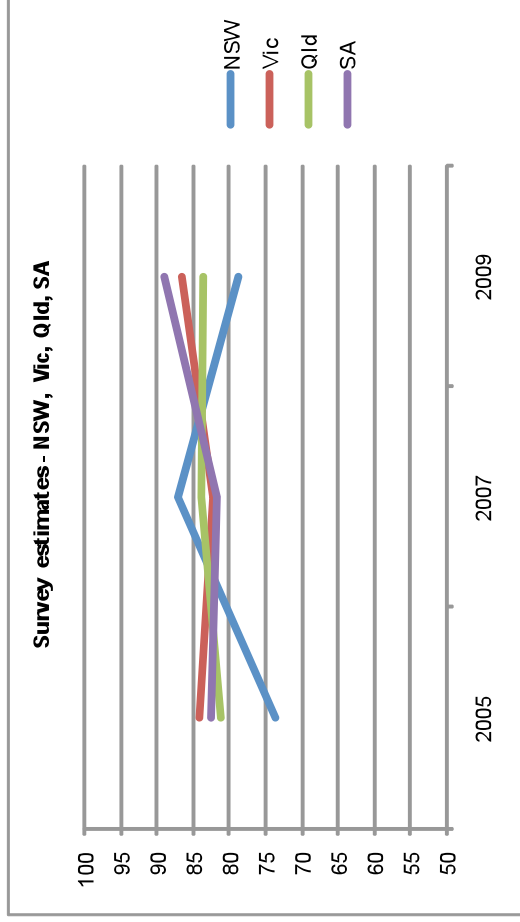
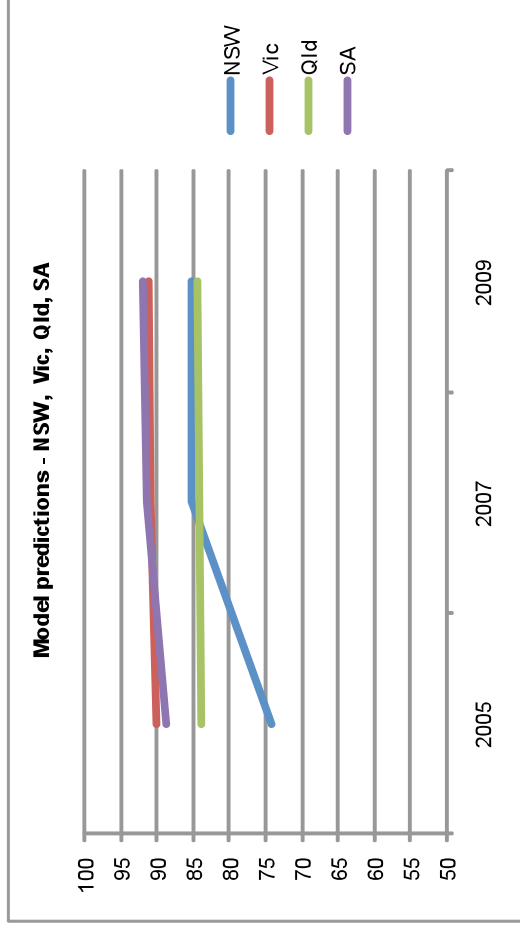
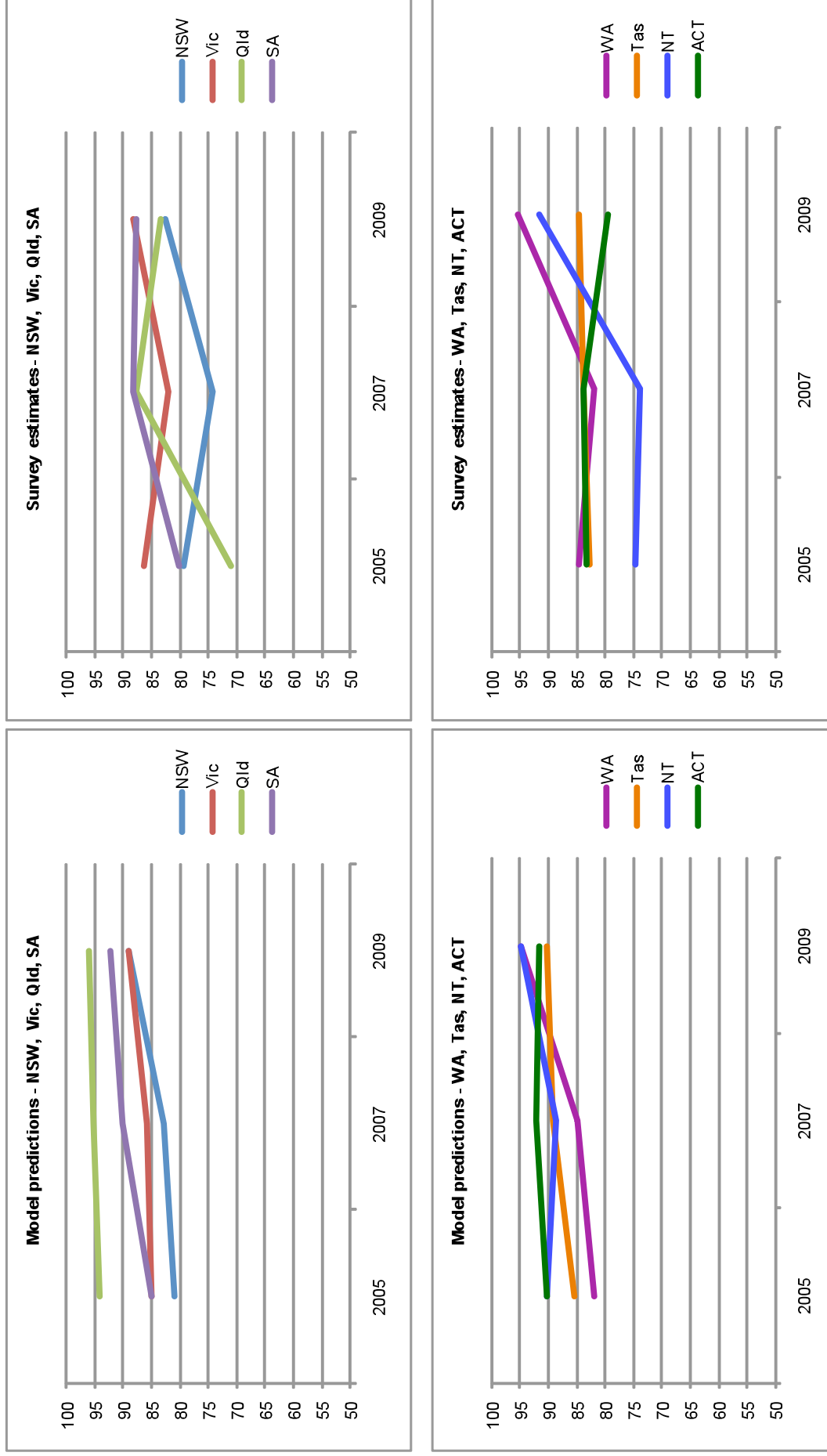


Figure 3 Comparison of modelled predictions with survey estimates of employer satisfaction with nationally recognised training



Discussion

The Survey of Employer Use and Views of the VET System monitors changes in employer satisfaction with vocational education and training over time. At the state and territory level, large standard errors are associated with estimates of employer satisfaction and few differences between years are statistically significant.

A model-based approach was used to investigate changes in employer satisfaction between survey years for a given state, industry and employer size combination, that is, the three stratum variables. Within each combination, the model detects statistically significant differences in employer satisfaction even when none are observed in survey estimates. Model differences in employer satisfaction were statistically significant in 14 cases (tables 2, 3 and 4). Only eight of these were observed in survey estimates. Hence, the model 'predicts' differences beyond the state by industry by size influences.

In conclusion, the differences in survey estimates between years are real effects, and not due to the distribution of responding employers. There were other significant differences brought out by the model that do not appear to be significant from the survey estimates. This indicates that influences other than an employer's state, industry and size affect satisfaction with vocational education and training.

References

- Brooks, L & Awodeyi, T 2008, *Has employer satisfaction with vocational education and training changed between 2005 and 2007?*, NCVET, Adelaide.
- NCVER (National Centre for Vocational Education Research) 2009, *Employers' use and views of the VET system*, NCVET, Adelaide.

Appendix A:

Differences in the survey estimates

Employer satisfaction varies across states and territories, with some large fluctuations across the years (tables A1 and A2). Standard errors at this level are quite substantial and only some of the movements are statistically significant.

Large fluctuations in employer satisfaction are also observed across industries between the survey years (tables A3 and A4). Standard errors at this level are very large, with only one movement statistically significant between 2007 and 2009 (table A4).

Table A1 Percentage point difference between 2007 and 2009 in the proportion of employers who are satisfied with training as a way of meeting their skill needs by state¹

State	Employers with vocational qualifications as a job requirement		Employers with apprentices/trainees		Employers using nationally recognised training ²	
	Percentage point difference 2009 to 2007	95% confidence interval	Percentage point difference 2009 to 2007	95% confidence interval	Percentage point difference 2009 to 2007	95% confidence interval
	%	±	%	±	%	±
NSW	0.6	9.0	-8.3	9.5	8.3	11.9
Vic.	-0.9	9.2	4.3	11.1	6.2	13.8
Qld	7.4	12.9	-0.3	10.3	-4.3	10.0
SA	-3.2	9.9	7.4	10.7	-0.3	9.7
WA	15.1	10.1	12.5	11.9	13.6	8.5
Tas.	1.4	9.0	-2.5	7.9	0.9	11.6
NT	7.1	10.7	-5.2	11.6	17.8	9.9
ACT	-4.8	9.8	3.0	10.8	-4.3	11.4

Notes: 1 'Satisfied' was rated as either satisfied or very satisfied.

2 Nationally recognised training is defined as nationally recognised training other than as part of an apprenticeship or traineeship. For the purposes of this survey, apprenticeships and traineeships are reported separately.

Shading indicates a statistically significant difference between 2007 and 2009 at the 95% level.

Source: NCVET Employer Use and Views of the VET System (2007, 2009).

Table A2 Percentage point difference between 2005 and 2009 in the proportion of employers who are satisfied with training as a way of meeting their skill needs by state¹

State	Employers with vocational qualifications as a job requirement		Employers with apprentices/trainees		Employers using nationally recognised training ²	
	Percentage point difference 2009 to 2005	95% confidence interval	Percentage point difference 2009 to 2005	95% confidence interval	Percentage point difference 2009 to 2005	95% confidence interval
	%	±	%	±	%	±
NSW	4.2	10.5	5.1	13.0	3.2	12.8
Vic.	6.8	11.5	2.5	9.1	2.0	10.1
Qld	10.4	11.0	2.3	10.6	12.5	13.7
SA	15.1	12.7	6.6	9.9	7.6	11.8
WA	3.4	8.8	2.6	11.7	10.7	9.0
Tas.	5.5	9.3	6.9	9.0	1.8	11.4
NT	16.2	11.7	-6.7	12.5	17.3	10.8
ACT	2.0	10.9	14.9	12.5	-3.7	11.9

Notes: 1 'Satisfied' was rated as either satisfied or very satisfied.

2 Nationally recognised training is defined as nationally recognised training other than as part of an apprenticeship or traineeship. For the purposes of this survey, apprenticeships and traineeships are reported separately.

Shading indicates a statistically significant difference between 2007 and 2009 at the 95% level.

Source: NCVET Employer Use and Views of the VET System (2007, 2009).

Table A3 Percentage point difference between 2005 and 2009 in the proportion of employers who are satisfied with training as a way of meeting their skill needs by industry¹

Industry	Employers with vocational qualifications as a job requirement		Employers with apprentices/trainees		Employers using nationally recognised training ²	
	Percentage point difference 2005 to 2009	95% confidence interval	Percentage point difference 2005 to 2009	95% confidence interval	Percentage point difference 2005 to 2009	95% confidence interval
	%	±	%	±	%	±
Agriculture, forestry & fishing	-12.5	27.0	-2.0	22.1	-16.2	23.5
Mining	-4.7	13.2	0.6	9.0	45.8	35.7
Manufacturing	5.3	14.4	3.5	13.9	-0.6	13.3
Electricity, gas & water supply	-3.8	37.9	1.4	31.4	-51.0	44.0
Construction	19.3	19.2	5.6	13.7	23.8	18.9
Wholesale trade	23.3	20.4	6.5	35.3	18.6	22.3
Retail trade	-3.5	18.4	14.7	15.7	-10.6	14.3
Accommodation, cafes & restaurants	5.1	17.9	-17.9	21.3	6.7	22.4
Transport & storage	19.8	21.8	-1.7	36.5	3.7	21.1
Communication services	36.4	45.1	-2.4	7.9	23.3	27.0
Finance & insurance	4.5	13.5	-2.1	23.9	7.7	12.8
Property & business services	5.6	21.2	-5.5	23.2	2.4	22.4
Government administration & defence	4.8	6.6	5.8	6.8	12.8	9.2
Education	10.9	12.8	-1.4	16.6	8.0	18.8
Health & community services	1.4	11.4	12.0	14.5	5.9	10.9
Cultural & recreational services	20.0	31.6	-18.9	22.9	16.1	22.7
Personal & other services	4.1	17.9	5.7	20.0	5.6	25.4
Total	6.6	5.5	4.1	5.7	5.5	6.0

Notes: 1 'Satisfied' was rated as either satisfied or very satisfied.

2 Nationally recognised training is defined as nationally recognised training other than as part of an apprenticeship or traineeship. For the purposes of this survey, apprenticeships and traineeships are reported separately.

Shading indicates a statistically significant difference between 2007 and 2009 at the 95% level.

Source: NCVET Employer Use and Views of the VET System (2007, 2009).

Table A4 Percentage point difference between 2007 and 2009 in the proportion of employers who are satisfied with training as a way of meeting their skill needs by industry¹

Industry	Employers with vocational qualifications as a job requirement		Employers with apprentices/trainees		Employers using nationally recognised training ²	
	Percentage point difference 2007 to 2009	95% confidence interval	Percentage point difference 2007 to 2009	95% confidence interval	Percentage point difference 2007 to 2009	95% confidence interval
	%	±	%	±	%	±
Agriculture, forestry & fishing	-20.4	25.3	0.8	28.2	3.6	34.7
Mining	23.3	25.7	-3.2	6.0	1.6	7.4
Manufacturing	5.5	13.3	0.3	12.0	-4.5	10.6
Electricity, gas & water supply	-4.4	33.3	-6.7	23.6	-71.1	24.1
Construction	-5.1	9.8	1.3	10.8	15.6	17.6
Wholesale trade	11.6	17.7	-18.0	24.0	9.5	14.4
Retail trade	-10.8	16.3	-1.1	10.7	-1.2	16.5
Accommodation, cafes & restaurants	11.8	19.6	-12.7	23.1	-2.7	15.3
Transport & storage	18.4	21.7	-16.8	30.1	11.9	25.2
Communication services	22.4	32.3	4.7	13.0	15.8	21.2
Finance & insurance	13.1	22.8	-4.9	30.3	10.8	21.3
Property & business services	7.1	12.2	-5.9	14.7	6.2	16.3
Government administration & defence	8.4	8.6	6.1	7.6	3.9	6.6
Education	-2.3	10.3	0.9	21.5	6.7	27.6
Health & community services	-3.1	11.4	20.9	20.9	-0.6	9.5
Cultural & recreational services	2.5	27.9	-9.4	30.1	3.2	7.7
Personal & other services	14.7	19.1	6.0	18.0	23.9	32.4
Total	2.6	4.9	-0.1	5.0	5.4	5.9

Notes: 1 'Satisfied' was rated as either satisfied or very satisfied.

2 Nationally recognised training is defined as nationally recognised training other than as part of an apprenticeship or traineeship. For the purposes of this survey, apprenticeships and traineeships are reported separately.

Shading indicates a statistically significant difference between 2007 and 2009 at the 95% level.

Source: NCVET Employer Use and Views of the VET System (2007, 2009).

Appendix B:

Regression results

Regression results by jurisdiction and aspect of VET

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South Australia – Apprentices and trainees	48
Western Australia – Apprentices and trainees	50
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Northern Territory – Apprentices and trainees	54
Australian Capital Territory – Apprentices and trainees	57
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Victoria – Nationally recognised training	61
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South Australia – Nationally recognised training	66
Western Australia – Nationally recognised training	68
Tasmania – Nationally recognised training	70
Northern Territory – Nationally recognised training	72
Australian Capital Territory – Nationally recognised training	75

Summary of significant contributors to differences in employer satisfaction

The logistic regression models can identify which factors contribute significantly to differences in employer satisfaction within and between years. When an industry by size indicator variable is significant, this tells us that that industry by size combination (for that model) generally has a significantly different satisfaction from the reference industry, namely, small communication industry employers. When a year indicator variable is significant, the satisfaction levels in that model, accounting for industry by size, are significantly different from those in 2009, the reference year. In this case, an odds ratio less than one means that satisfaction in that year was lower than in 2009. Conversely, an odds ratio larger than one means that satisfaction in that year was higher than in 2009.

In the following tables (tables B1 to B3) we list the indicator variables that contribute significantly (at the 95% level) to the satisfaction models for each aspect and state. The states in which there are statistically significant differences in survey estimates are footnoted, to allow comparison with statistically significant differences in model estimates.

Table B1 Significant contributors in the models to employer satisfaction with vocational qualifications as a job requirement

State	Indicator variable	Odds ratio ¹	p-value
NSW	Electricity, gas and water supply – Medium (10–99 employees)	0.05	0.0081
	Government administration and defence – Large (100+ employees)	6.73	0.0092
Vic.	2007	0.66	0.0491
SA ^a	2005	0.51	0.011
WA ^b	2007	0.53	0.0041
	Retail trade – Medium (10–99 employees)	0.31	0.0243
	Wholesale trade – Large (100+ employees)	0.18	0.0442
Tas.	Construction – Medium (10–99 employees)	0.28	0.0091

Notes: 1 Odds ratios are by comparison with the references classes '2009' for year variables and 'Communications industry – Small (1–9 employees)' for industry variables.

a Indicates a statistically significant difference between 2005 and 2009 survey estimates for this state (see table A1).

b Indicates a statistically significant difference between 2007 and 2009 survey estimates for this state (see table A2).

Table B2 Significant contributors in the models to employer satisfaction with apprentices/trainees

State	Indicator variable	Odds ratio ¹	p-value
NSW	2005	0.50	0.0034
	Construction – Medium (10–99 employees)	4.45	0.0449
	Government administration and defence – Large (100+ employees)	15.70	0.0072
Vic.	Finance and insurance – Large (100+ employees)	0.29	0.0256
Qld	Cultural and recreational services – Large (100+ employees)	0.27	0.0401
	Transport and storage – Medium (10–99 employees)	0.34	0.0205
WA ^b	2007	0.58	0.0178
Tas.	2005	0.56	0.0316
	Accommodation, cafes and restaurants – Large (100+ employees)	0.14	0.0338
	Wholesale trade – Large (100+ employees)	0.06	0.0168
ACT ^a	2005	0.41	0.0028
	Health and community services – Large (100+ employees)	8.01	0.0451

Notes: 1 Odds ratios are by comparison with the references of '2009' for year variables and with 'Communications industry – Small (1–9 employees)' for industry variables.

a Indicates a statistically significant difference between 2005 and 2009 survey estimates for this state (see table A1).

b Indicates a statistically significant difference between 2007 and 2009 survey estimates for this state (see table A2).

Table B3 Significant contributors in the models to employer satisfaction with nationally recognised training

State	Indicator variable	Odds ratio ¹	p-value
NSW	2005	0.53	0.0087
	2007	0.59	0.025
Vic.	Personal and other services – Large (100+ employees)	0.20	0.041
	Retail trade – Large (100+ employees)	0.28	0.0392
SA	2005	0.47	0.0161
	Health and community services – Large (100+ employees)	0.24	0.0067
	Manufacturing – Medium (10–99 employees)	0.19	0.0048
	Retail trade – Large (100+ employees)	0.22	0.0243
WA ^a	2005	0.25	<.0001
	2007	0.31	0.0007
Tas.	Mining – Large (100+ employees)	0.18	0.0452
NT ^b	2005	0.50	0.0407
	2007	0.42	0.0125
	Cultural and recreational services – Medium (10–99 employees)	0.19	0.0164

Notes: 1 Odds ratios are by comparison with the references of '2009' for year variables and with 'Communications industry – Small (1–9 employees)' for industry variables.

a Indicates a statistically significant difference between 2005 and 2009 survey estimates for this state (see table A1).

b Indicates a statistically significant difference between 2007 and 2009 survey estimates for this state (see table A2).

New South Wales – Formal vocational qualification

Number of Observations Read 1229
 Number of Observations Used 1229

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	212	
2	1	1017	

Probability modeled is satis10=1.

Model Convergence Status
 Convergence criterion (GCONV=1E-8) satisfied.
 Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	1132.250	1151.427
SC	1137.364	1330.415
-2 Log L	1130.250	1081.427
R-Square	0.0389	Max-rescaled R-Square 0.0648

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	48.8229	34	0.0479
Score	49.8571	34	0.0389
Wald	34.5576	34	0.4411

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Wald	Pr > ChiSq
Year	2	0.6434		0.7249
industry*A5SUM	32	33.6958		0.3854

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Wald	Pr > ChiSq
Intercept	1	1.4395	0.1697	71.9910		<.0001
Year 2005	1	-0.1602	0.2024	0.6267		0.4286
Year 2007	1	-0.0514	0.1851	0.0771		0.7812
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	0.9077	0.7533	1.4518		0.2282
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	0.8764	0.7543	1.3499		0.2453
industry*A5SUM Agriculture, Forestry And Fishing Large (100+ employees)	1	-0.6639	0.7197	0.8508		0.3563

industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	-0.3853	0.6892	0.3126	0.5761
industry*A5SUM Construction	Large (100+ employees)	1	-0.3628	0.5382	0.4545	0.5002
industry*A5SUM Construction	Medium (10-99 employees)	1	0.8045	0.6224	1.6709	0.1961
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	0.8865	0.7543	1.3810	0.2399
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.1326	0.5248	0.0638	0.8005
industry*A5SUM Education	Large (100+ employees)	1	0.6218	0.6287	0.9782	0.3226
industry*A5SUM Education	Medium (10-99 employees)	1	0.4032	0.5575	0.5231	0.4695
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	0.5021	0.6352	0.6249	0.4292
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-2.9259	1.1049	7.0126	0.0081
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	-0.4106	0.4966	0.6836	0.4083
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	0.2628	0.5051	0.2707	0.6029
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	1.9072	0.7322	6.7853	0.0092
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.9948	0.7514	1.7529	0.1855
industry*A5SUM Health And Community Services	Large (100+ employees)	1	0.4157	0.4996	0.6922	0.4054
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.2086	0.4663	0.2001	0.6546
industry*A5SUM Manufacturing	Large (100+ employees)	1	0.2300	0.5630	0.1670	0.6828
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	-0.2090	0.3560	0.3448	0.5571
industry*A5SUM Mining	Large (100+ employees)	1	0.1328	0.5676	0.0547	0.8150
industry*A5SUM Mining	Medium (10-99 employees)	1	13.5175	489.3	0.0008	0.9780
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	0.5742	0.7667	0.5608	0.4539
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-0.1324	0.5824	0.0517	0.8202
industry*A5SUM Property And Business Services	Large (100+ employees)	1	-0.1361	0.4213	0.1044	0.7466
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	0.6154	0.3991	2.3777	0.1231
industry*A5SUM Retail Trade	Large (100+ employees)	1	0.3645	0.6399	0.3245	0.5689
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	0.5609	0.4557	1.5151	0.2184
industry*A5SUM Transport And Storage	Large (100+ employees)	1	-0.1364	0.4215	0.1047	0.7462
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	0.2966	0.5048	0.3452	0.5569
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-0.6850	0.8770	0.6101	0.4348
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	0.8060	0.7568	1.1343	0.2868

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.852	0.573 1.267
Year 2007 vs 2009	0.950	0.661 1.365

Association of Predicted Probabilities and Observed Responses

Percent Concordant	60.5	Somers' D	0.257
Percent Discordant	34.7	Gamma	0.270
Percent Tied	4.8	Tau-a	0.074
Pairs	215604	C	0.629

Victoria – Formal vocational qualification

Number of Observations Read 980
 Number of Observations Used 980

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	156	
2	1	824	

Probability modeled is satis10=1.

Model Convergence Status
 Convergence criterion (GCONV=1E-8) satisfied.
 Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	861.095	889.778
SC	865.982	1060.842
-2 Log L	859.095	819.778
R-Square	0.0393	Max-rescaled R-Square 0.0674

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	39.3170	34	0.2439
Score	32.9562	34	0.5186
Wald	25.0527	34	0.8676

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Wald	Pr > ChiSq
Year	2	4.1688		0.1244
industry*A5SUM	32	21.2572		0.9259

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Wald	Pr > ChiSq
Intercept	1	1.5710	0.1908	67.8250		<.0001
Year 2005	1	-0.3205	0.2284	1.9682		0.1606
Year 2007	1	-0.4205	0.2137	3.8704		0.0491
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	0.1113	0.6592	0.0285		0.8659
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	1.3398	1.0431	1.6498		0.1990
industry*A5SUM Agriculture, Forestry And Fishing Large (100+ employees)	1	-0.1486	0.8378	0.0315		0.8592

industry*A5SUM Agriculture, Forestry And Fishing	Medium (10--99 employees)	1	0.5594	0.7756	0.5203	0.4707
industry*A5SUM Construction	Large (100+ employees)	1	0.2102	0.6551	0.1030	0.7483
industry*A5SUM Construction	Medium (10--99 employees)	1	1.8397	1.0325	3.1747	0.0748
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	0.8860	0.7593	1.3617	0.2432
industry*A5SUM Cultural And Recreational Services	Medium (10--99 employees)	1	-0.1086	0.5878	0.0342	0.8534
industry*A5SUM Education	Large (100+ employees)	1	1.0700	0.7544	2.0116	0.1561
industry*A5SUM Education	Medium (10--99 employees)	1	0.6872	0.5538	1.5398	0.2146
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	0.4879	0.5641	0.7480	0.3871
industry*A5SUM Electricity, Gas And Water Supply	Medium (10--99 employees)	1	14.6350	962.4	0.0002	0.9879
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	-0.0278	0.5894	0.0022	0.9623
industry*A5SUM Finance And Insurance	Medium (10--99 employees)	1	0.4648	0.6426	0.5231	0.4695
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.3893	0.5650	0.4748	0.4908
industry*A5SUM Government Administration And Defence	Medium (10--99 employees)	1	14.6118	960.8	0.0002	0.9879
industry*A5SUM Health And Community Services	Large (100+ employees)	1	1.0448	0.5457	3.6658	0.0555
industry*A5SUM Health And Community Services	Medium (10--99 employees)	1	1.1640	0.6197	3.5278	0.0603
industry*A5SUM Manufacturing	Large (100+ employees)	1	-0.0763	0.4293	0.0316	0.8589
industry*A5SUM Manufacturing	Medium (10--99 employees)	1	0.0104	0.4539	0.0005	0.9817
industry*A5SUM Mining	Large (100+ employees)	1	14.6000	958.8	0.0002	0.9879
industry*A5SUM Mining	Medium (10--99 employees)	1	-0.4738	0.7088	0.4468	0.5038
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.1438	0.8184	0.0309	0.8605
industry*A5SUM Personal And Other Services	Medium (10--99 employees)	1	1.3554	1.0471	1.6753	0.1956
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.1665	0.4794	0.1206	0.7284
industry*A5SUM Property And Business Services	Medium (10--99 employees)	1	0.0367	0.3601	0.0104	0.9188
industry*A5SUM Retail Trade	Large (100+ employees)	1	1.2787	1.0500	1.4831	0.2233
industry*A5SUM Retail Trade	Medium (10--99 employees)	1	0.0994	0.5791	0.0295	0.8637
industry*A5SUM Transport And Storage	Large (100+ employees)	1	0.4379	0.5618	0.6076	0.4357
industry*A5SUM Transport And Storage	Medium (10--99 employees)	1	1.2286	1.0499	1.3694	0.2419
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	0.7435	1.0672	0.4854	0.4860
industry*A5SUM Wholesale Trade	Medium (10--99 employees)	1	0.4682	0.6458	0.5257	0.4684

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.726	0.464 1.136
Year 2007 vs 2009	0.657	0.432 0.998

Association of Predicted Probabilities and Observed Responses

Percent Concordant	62.2	Somers' D	0.290
Percent Discordant	33.3	Gamma	0.304
Percent Tied	4.5	Tau-a	0.078
Pairs	128544	C	0.645

Queensland - Formal Vocational Qualification

Number of Observations Read 887
 Number of Observations Used 887

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	181	
2	1	706	

Probability modeled is satis10=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	899.604	930.960
SC	904.392	1103.322
-2 Log L	897.604	858.960
R-Square	0.0426	Max-rescaled R-Square 0.0670

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	38.6444	35	0.3084
Score	37.7005	35	0.3467
Wald	33.6301	35	0.5342

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Wald	Pr > ChiSq
Year	2	3.3452		0.1878
industry*A5SUM	33	29.0220		0.6656

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

industryCan_t_SayA5SUMMedium__10 = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Wald Pr > ChiSq
Intercept	1	1.5883	0.2059	59.4992	<.0001
Year	1	-0.3716	0.2181	2.9030	0.0884
Year	1	-0.3264	0.2202	2.1966	0.1383

industry*A5SUM Accommodation, Cafes And Restaurants	Large (100+ employees)	1	0.3501	0.6465	0.2932	0.5881
industry*A5SUM Accommodation, Cafes And Restaurants	Medium (10-99 employees)	1	-0.1338	0.6777	0.0390	0.8435
industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	-0.0638	1.1340	0.0032	0.9552
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	-0.7616	0.7487	1.0347	0.3091
industry*A5SUM Can't Say	Large (100+ employees)	1	11.1413	581.0	0.0004	0.9847
industry*A5SUM Can't Say	Medium (10-99 employees)	0	0	.	.	.
industry*A5SUM Construction	Large (100+ employees)	1	0.2547	0.6545	0.1514	0.6972
industry*A5SUM Construction	Medium (10-99 employees)	1	-0.1350	0.4581	0.0868	0.7682
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	-0.7284	0.7490	0.9458	0.3308
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	1.0482	1.0622	0.9739	0.3237
industry*A5SUM Education	Large (100+ employees)	1	1.3965	1.0441	1.7890	0.1811
industry*A5SUM Education	Medium (10-99 employees)	1	0.6150	0.6357	0.9361	0.3333
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	-0.4284	0.4762	0.8093	0.3683
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	0.3371	1.1102	0.0922	0.7614
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	-0.9750	0.6673	2.1348	0.1440
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	-0.4089	0.5500	0.5528	0.4572
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.1830	0.4000	0.2093	0.6473
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	-0.4699	0.6226	0.5696	0.4504
industry*A5SUM Health And Community Services	Large (100+ employees)	1	1.7863	1.0331	2.9896	0.0838
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.1337	0.4233	0.0997	0.7522
industry*A5SUM Manufacturing	Large (100+ employees)	1	-0.3255	0.4421	0.5420	0.4616
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	-0.7184	0.4286	2.8102	0.0937
industry*A5SUM Mining	Large (100+ employees)	1	0.3433	0.6511	0.2780	0.5980
industry*A5SUM Mining	Medium (10-99 employees)	1	-0.7247	0.5810	1.5561	0.2122
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.5993	0.5637	1.1303	0.2877
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	1.0575	1.0569	1.0012	0.3170
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.3364	0.5161	0.4248	0.5146
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	0.1113	0.4506	0.0610	0.8049
industry*A5SUM Retail Trade	Large (100+ employees)	1	0.4986	0.7774	0.4114	0.5213
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	0.7619	0.6325	1.4513	0.2283
industry*A5SUM Transport And Storage	Large (100+ employees)	1	0.5412	0.6405	0.7141	0.3981
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.1387	0.5909	0.0551	0.8145
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-0.9657	0.9293	1.0799	0.2987
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	-1.2934	0.8332	2.4097	0.1206

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
year 2005 vs 2009	0.690	0.450 1.057
year 2007 vs 2009	0.722	0.469 1.111

Association of Predicted Probabilities and Observed Responses

Percent Concordant	61.3	Somers' D	0.269
Percent Discordant	34.4	Gamma	0.281
Percent Tied	4.4	Tau-a	0.087
Pairs	127786	C	0.634

South Australia – Formal vocational qualification

Number of Observations Read 690
 Number of Observations Used 690

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	121	
2	1	569	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Covariates	Intercept and Covariates
AIC	642.717	661.815	
SC	647.254	820.600	
-2 Log L	640.717	591.815	
R-Square	0.0684	Max-rescaled R-Square	0.1131

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	48.9018	34	0.0471
Score	43.0366	34	0.1377
Wald	30.0612	34	0.6612

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	6.8166	0.0331
industry*A5SUM	32	26.3230	0.7491

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.8422	0.2663	47.8712	<.0001
year 2005	1	-0.6766	0.2662	6.4607	0.0110
year 2007	1	-0.2475	0.2802	0.7800	0.3771
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	14.2393	868.6	0.0003	0.9869
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	-0.3031	0.6054	0.2507	0.6166

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	0.1369	1.1166	0.0150	0.9024
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	14.6926	1388.5	0.0001	0.9916
industry*A5SUM Construction	Large (100+ employees)	1	0.6856	1.0741	0.4075	0.5233
industry*A5SUM Construction	Medium (10-99 employees)	1	0.2732	0.6542	0.1744	0.6762
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	14.3530	1223.6	0.0001	0.9906
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	0.6992	1.0806	0.4187	0.5176
industry*A5SUM Education	Large (100+ employees)	1	0.8236	0.7656	1.1573	0.2820
industry*A5SUM Education	Medium (10-99 employees)	1	-0.4760	0.4608	1.0673	0.3016
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	14.4485	1120.6	0.0002	0.9897
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	14.3323	758.3	0.0004	0.9849
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	0.5859	1.0765	0.2963	0.5862
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	1.4079	1.0473	1.8072	0.1788
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.4361	0.7817	0.3113	0.5769
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	1.3973	1.0474	1.7795	0.1822
industry*A5SUM Health And Community Services	Large (100+ employees)	1	-0.9300	0.4798	3.7563	0.0526
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	-0.1612	0.4201	0.1472	0.7012
industry*A5SUM Manufacturing	Large (100+ employees)	1	-0.4018	0.5539	0.5262	0.4682
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.7422	0.6391	1.3484	0.2455
industry*A5SUM Mining	Large (100+ employees)	1	-1.7185	1.0258	2.8064	0.0939
industry*A5SUM Mining	Medium (10-99 employees)	1	-0.4053	0.6918	0.3432	0.5580
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.0235	1.1393	0.0004	0.9835
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	0.0832	0.8016	0.0108	0.9173
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.4208	0.6477	0.4220	0.5159
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.8958	0.4776	3.5181	0.0607
industry*A5SUM Retail Trade	Large (100+ employees)	1	-0.6289	0.6257	1.0103	0.3148
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	0.2007	0.6619	0.0920	0.7617
industry*A5SUM Transport And Storage	Large (100+ employees)	1	0.8356	0.7658	1.1904	0.2752
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.0833	0.8211	0.0103	0.9192
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-1.4415	1.0271	1.9696	0.1605
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	-0.4837	0.8643	0.3132	0.5757

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.508	0.302 0.857
Year 2007 vs 2009	0.781	0.451 1.352

Association of Predicted Probabilities and Observed Responses

Percent Concordant	66.3	Somers' D	0.367
Percent Discordant	29.5	Gamma	0.384
Percent Tied	4.2	Tau-a	0.106
Pairs	68849	C	0.684

Western Australia – Formal vocational qualification

Number of Observations Read 849
 Number of Observations Used 849

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	161	
2	1	688	

Probability modeled is satis10=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	826.707	847.290
SC	831.451	1013.332
-2 Log L	824.707	777.290
R-Square	0.0543	Max-rescaled R-Square 0.0874

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	47.4170	34	0.0630
Score	45.0643	34	0.0972
Wald	35.7507	34	0.3861

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	11.0026	0.0041
industry*A5SUM	32	27.6014	0.6889

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Wald Pr > ChiSq
Intercept	1	1.8032	0.2225	65.6986	<.0001
Year 2005	1	-0.0183	0.2418	0.0058	0.9395
Year 2007	1	-0.6313	0.2197	8.2564	0.0041
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	0.4893	0.7713	0.4024	0.5259
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	-0.6854	0.5565	1.5169	0.2181
industry*A5SUM Agriculture, Forestry And Fishing Large (100+ employees)	1	-0.8802	1.2481	0.4973	0.4807

industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	13.9941	1550.4	0.0001	0.9928
industry*A5SUM Construction	Large (100+ employees)	1	-0.1325	0.5305	0.0624	0.8027
industry*A5SUM Construction	Medium (10-99 employees)	1	-0.1539	0.5260	0.0856	0.7699
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	-0.2659	0.6712	0.1570	0.6920
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.4485	0.6005	0.5578	0.4551
industry*A5SUM Education	Large (100+ employees)	1	0.5752	0.6370	0.8154	0.3665
industry*A5SUM Education	Medium (10-99 employees)	1	0.3866	0.6389	0.3662	0.5451
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	-1.4845	0.8429	3.1016	0.0782
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-0.6269	0.7027	0.7958	0.3724
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	0.3530	0.6438	0.3006	0.5835
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	-0.3601	0.6926	0.2704	0.6031
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	-0.7296	0.6200	1.3850	0.2392
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	-0.1389	0.5289	0.0690	0.7928
industry*A5SUM Health And Community Services	Large (100+ employees)	1	1.5710	1.0403	2.2805	0.1310
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	-0.5376	0.4460	1.4531	0.2280
industry*A5SUM Manufacturing	Large (100+ employees)	1	14.3233	705.9	0.0004	0.9838
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	-0.6789	0.4864	1.9484	0.1628
industry*A5SUM Mining	Large (100+ employees)	1	-0.2399	0.4889	0.2408	0.6236
industry*A5SUM Mining	Medium (10-99 employees)	1	0.5881	0.7667	0.5884	0.4430
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	0.2010	1.0998	0.0334	0.8550
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-1.0541	0.6547	2.5928	0.1073
industry*A5SUM Property And Business Services	Large (100+ employees)	1	-0.2649	0.5412	0.2395	0.6246
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	0.0245	0.4089	0.0036	0.9523
industry*A5SUM Retail Trade	Large (100+ employees)	1	0.4586	0.7779	0.3476	0.5555
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-1.1637	0.5165	5.0760	0.0243
industry*A5SUM Transport And Storage	Large (100+ employees)	1	0.4546	0.6410	0.5030	0.4782
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.3493	0.5387	0.4204	0.5167
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-1.6907	0.8403	4.0479	0.0442
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	14.1683	1325.3	0.0001	0.9915

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.982	0.611 1.577
Year 2007 vs 2009	0.532	0.346 0.818

Association of Predicted Probabilities and Observed Responses

Percent Concordant	64.2	Somers' D	0.323
Percent Discordant	31.9	Gamma	0.336
Percent Tied	3.9	Tau-a	0.099
Pairs	110768	C	0.662

Tasmania – Formal vocational qualification

Number of Observations Read 604
 Number of Observations Used 604

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	104	
2	1	500	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	556.876	578.300
SC	561.280	732.425
-2 Log L	554.876	508.300
R-Square	0.0742	Max-rescaled R-Square 0.1235

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	46.5766	34	0.0738
Score	44.4496	34	0.1083
Wald	23.8020	34	0.9040

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	4.8517	0.0884
industry*A5SUM	32	20.5132	0.9418

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.9102	0.2700	50.0630	<.0001
Year 2005	1	-0.5059	0.2784	3.3015	0.0692
Year 2007	1	0.0251	0.3066	0.0067	0.9347
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	-1.6635	1.0273	2.6219	0.1054
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	0.1149	1.1023	0.0109	0.9170

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	-1.1992	0.9412	1.6235	0.2026
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	-0.1166	1.1186	0.0109	0.9170
industry*A5SUM Construction	Large (100+ employees)	1	-0.6184	0.8466	0.5335	0.4651
industry*A5SUM Construction	Medium (10-99 employees)	1	-1.2861	0.4931	6.8030	0.0091
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	0.2610	1.1036	0.0559	0.8131
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.2602	0.8201	0.1007	0.7510
industry*A5SUM Education	Large (100+ employees)	1	12.1351	263.2	0.0021	0.9632
industry*A5SUM Education	Medium (10-99 employees)	1	0.0842	0.5812	0.0210	0.8849
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	12.2272	720.4	0.0003	0.9865
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-0.9534	0.8967	1.1304	0.2877
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	12.1312	416.0	0.0009	0.9767
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	-0.6457	0.6139	1.1064	0.2929
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	-0.1675	0.5852	0.0820	0.7747
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	1.1970	1.0471	1.3067	0.2530
industry*A5SUM Health And Community Services	Large (100+ employees)	1	0.3672	0.6440	0.3252	0.5685
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	-0.5872	0.4166	1.9867	0.1587
industry*A5SUM Manufacturing	Large (100+ employees)	1	0.0165	0.6634	0.0006	0.9802
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	-0.5928	0.5135	1.3325	0.2484
industry*A5SUM Mining	Large (100+ employees)	1	-1.2337	0.8965	1.8939	0.1688
industry*A5SUM Mining	Medium (10-99 employees)	1	-0.8116	1.1858	0.4684	0.4937
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	0.4120	1.0824	0.1448	0.7035
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-0.4953	0.6864	0.5207	0.4706
industry*A5SUM Property And Business Services	Large (100+ employees)	1	-0.0413	1.1031	0.0014	0.9702
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	0.9744	1.0533	0.8557	0.3549
industry*A5SUM Retail Trade	Large (100+ employees)	1	12.1163	322.5	0.0014	0.9700
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-0.3472	0.6784	0.2619	0.6088
industry*A5SUM Transport And Storage	Large (100+ employees)	1	12.3095	589.1	0.0004	0.9833
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	0.3023	0.7813	0.1497	0.6988
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-0.5481	1.1786	0.2163	0.6419
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	-16.9356	1435.0	0.0001	0.9906

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.603	0.349 1.041
Year 2007 vs 2009	1.025	0.562 1.870

Association of Predicted Probabilities and Observed Responses

Percent Concordant	64.4	Somers' D	0.333
Percent Discordant	31.1	Gamma	0.349
Percent Tied	4.5	Tau-a	0.095
Pairs	52000	C	0.667

Northern Territory – Formal vocational qualification

Number of Observations Read 465
 Number of Observations Used 465

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	110	110
2	1	355	355

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.
 WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	510.785	532.863
SC	514.928	665.408
-2 Log L	508.785	468.863
R-Square	0.0823	Max-rescaled R-Square 0.1237

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	39.9226	31	0.1308
Score	35.1440	31	0.2781
Wald	16.4953	31	0.9846

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq	Wald
Year	2	2.6729	0.2628	
industry*ASUM	29	12.8313	0.9959	

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.
 industryConstructionA5SUMLarge__ = 0
 industryElectricity__Gas_And_Wat = 0
 industryFinance_And_InsuranceA5S = 0

Analysis of Maximum Likelihood Estimates

Standard Wald

Parameter	DF	Estimate	Error	Chi-Square	Pr > ChiSq
Intercept	1	1.3328	0.2615	25.9709	<.0001
Year 2005	1	-0.4702	0.2877	2.6716	0.1022
Year 2007	1	-0.2550	0.2993	0.7262	0.3941
industry*A5SUM Accommodation, Cafes And Restaurants	1	13.6944	742.6	0.0003	0.9853
industry*A5SUM Accommodation, Cafes And Restaurants	1	-1.0124	0.8394	1.4545	0.2278
industry*A5SUM Agriculture, Forestry And Fishing	1	-15.9913	1928.2	0.0001	0.9934
industry*A5SUM Agriculture, Forestry And Fishing	1	-0.7282	0.9350	0.6065	0.4361
industry*A5SUM Construction	0	0	.	.	.
industry*A5SUM Construction	1	0.9830	0.6411	2.3511	0.1252
industry*A5SUM Cultural And Recreational Services	1	-0.1694	1.2462	0.0185	0.8919
industry*A5SUM Cultural And Recreational Services	1	-0.3154	0.7335	0.1849	0.6672
industry*A5SUM Education	1	0.5109	0.7977	0.4102	0.5219
industry*A5SUM Education	1	-0.3528	0.4547	0.6020	0.4378
industry*A5SUM Electricity, Gas And Water Supply	0	0	.	.	.
industry*A5SUM Electricity, Gas And Water Supply	1	-15.9913	1928.2	0.0001	0.9934
industry*A5SUM Finance And Insurance	0	0	.	.	.
industry*A5SUM Finance And Insurance	1	0.0178	0.8391	0.0005	0.9831
industry*A5SUM Government Administration And Defence	1	0.1673	0.6796	0.0606	0.8056
industry*A5SUM Government Administration And Defence	1	13.5659	445.4	0.0009	0.9757
industry*A5SUM Health And Community Services	1	0.9101	0.7757	1.3765	0.2407
industry*A5SUM Health And Community Services	1	-0.5136	0.4042	1.6146	0.2039
industry*A5SUM Manufacturing	1	-0.4752	1.2493	0.1447	0.7037
industry*A5SUM Manufacturing	1	0.3224	0.5869	0.3017	0.5828
industry*A5SUM Mining	1	0.4087	1.1165	0.1340	0.7144
industry*A5SUM Mining	1	0.0178	1.1723	0.0002	0.9879
industry*A5SUM Personal And Other Services	1	-0.3176	1.2474	0.0648	0.7990
industry*A5SUM Personal And Other Services	1	0.7144	1.0917	0.4283	0.5128
industry*A5SUM Property And Business Services	1	-0.1065	0.8481	0.0158	0.9000
industry*A5SUM Property And Business Services	1	-0.2642	0.5656	0.2182	0.6404
industry*A5SUM Retail Trade	1	13.4300	661.6	0.0004	0.9838
industry*A5SUM Retail Trade	1	0.6965	0.7915	0.7744	0.3788
industry*A5SUM Transport And Storage	1	13.4665	739.5	0.0003	0.9855
industry*A5SUM Transport And Storage	1	0.4114	0.5858	0.4933	0.4825
industry*A5SUM Wholesale Trade	1	-16.2065	1928.2	0.0001	0.9933
industry*A5SUM Wholesale Trade	1	0.7138	1.0990	0.4218	0.5160

Odds Ratio Estimates
Point Estimate 95% Wald Confidence Limits

year 2005 vs 2009	0.625	0.356	1.098
year 2007 vs 2009	0.775	0.431	1.393

Association of Predicted Probabilities and Observed Responses

Percent Concordant	64.1	Somers' D	0.336
Percent Discordant	30.5	Gamma	0.355
Percent Tied	5.4	Tau-a	0.122
Pairs	39050	c	0.668

Australian Capital Territory – Formal vocational qualification

Number of Observations Read 580
 Number of Observations Used 580

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	116	
2	1	464	

Probability modeled is satis10=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	582.467	620.944
SC	586.830	760.561
-2 Log L	580.467	556.944
R-Square	0.0397	Max-rescaled R-Square 0.0628

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	23.5223	31	0.8295
Score	21.0015	31	0.9119
Wald	16.0958	31	0.9874

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Wald	Pr > ChiSq
Year	2	3.6600		0.1604
industry*A5SUM	29	12.1838		0.9974

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.
 industryWholesale_TradeA5SUMLarg = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Wald Pr > ChiSq
Intercept	1	1.4274	0.2105	45.9640	<.0001
Year 2005	1	-0.4106	0.2521	2.6523	0.1034
Year 2007	1	0.0515	0.2731	0.0356	0.8503
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	14.5301	1303.1	0.0001	0.9911

industry*A5SUM Accommodation, Cafes And Restaurants	Medium (10-99 employees)	1	-0.1100	0.6745	0.0266	0.8705
industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	14.3189	2625.9	0.0000	0.9956
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	14.5064	1839.6	0.0001	0.9937
industry*A5SUM Construction	Large (100+ employees)	1	-0.7685	1.2400	0.3841	0.5354
industry*A5SUM Construction	Medium (10-99 employees)	1	-0.0239	0.5861	0.0017	0.9675
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	0.7988	1.0746	0.5526	0.4573
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.9107	0.6669	1.8650	0.1720
industry*A5SUM Education	Large (100+ employees)	1	1.7059	1.0375	2.7036	0.1001
industry*A5SUM Education	Medium (10-99 employees)	1	0.1396	0.6611	0.0446	0.8327
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	14.3189	2625.9	0.0000	0.9956
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-1.2221	1.4310	0.7293	0.3931
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	14.5064	1839.6	0.0001	0.9937
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	0.0596	0.5274	0.0128	0.9100
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.2874	0.6567	0.1915	0.6616
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.3238	1.1097	0.0852	0.7704
industry*A5SUM Health And Community Services	Large (100+ employees)	1	0.4242	0.5648	0.5642	0.4526
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.5507	0.5601	0.9668	0.3255
industry*A5SUM Manufacturing	Large (100+ employees)	1	0.6991	1.0765	0.4217	0.5161
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	-0.4385	0.6151	0.5082	0.4759
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	14.3189	2625.9	0.0000	0.9956
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	0.8460	1.0746	0.6198	0.4311
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.0688	0.6662	0.0107	0.9178
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	0.1825	0.5193	0.1235	0.7253
industry*A5SUM Retail Trade	Large (100+ employees)	1	-0.6078	0.8839	0.4728	0.4917
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-0.4490	0.4812	0.8709	0.3507
industry*A5SUM Transport And Storage	Large (100+ employees)	1	-1.0168	1.4286	0.5065	0.4766
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.0667	0.8112	0.0068	0.9345
industry*A5SUM Wholesale Trade	Large (100+ employees)	0	0	.	.	.
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	14.2674	2625.9	0.0000	0.9957

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.663	0.405 1.087
Year 2007 vs 2009	1.053	0.616 1.798

Association of Predicted Probabilities and Observed Responses

Percent Concordant	57.6	Somers' D	0.231
Percent Discordant	34.5	Gamma	0.251
Percent Tied	8.0	Tau-a	0.074
Pairs	53824	C	0.616

New South Wales – Apprentices and trainees

Number of Observations Read 936
 Number of Observations Used 936

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	148	
2	1	788	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	819.200	810.881
SC	824.042	980.338
-2 Log L	817.200	740.881
R-Square	0.0783	Max-rescaled R-Square 0.1345

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	76.3193	34	<.0001
Score	65.7690	34	0.0009
Wald	46.4585	34	0.0754

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	11.1332	0.0038
industry*A5SUM	32	38.2418	0.2070

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Wald	
			Error	Chi-Square Pr > ChiSq
Intercept	1	1.4881	0.1981	56.4203 <.0001
year 2005	1	-0.6976	0.2378	8.6034 0.0034
year 2007	1	0.00293	0.2289	0.0002 0.9898
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	0.8812	0.6298	1.9577 0.1618
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	-0.0837	0.5353	0.0245 0.8757

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	-0.1010	0.8410	0.0144	0.9044
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	1.0962	1.0792	1.0317	0.3098
industry*A5SUM Construction	Large (100+ employees)	1	-0.5963	0.5230	1.2999	0.2542
industry*A5SUM Construction	Medium (10-99 employees)	1	1.4940	0.7451	4.0208	0.0449
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	1.5322	1.0482	2.1367	0.1438
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.1373	0.5387	0.0650	0.7988
industry*A5SUM Education	Large (100+ employees)	1	1.2634	1.0525	1.4410	0.2300
industry*A5SUM Education	Medium (10-99 employees)	1	1.1053	1.0723	1.0625	0.3026
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	1.2428	0.7629	2.6534	0.1033
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-0.7905	1.4284	0.3063	0.5800
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	0.7971	1.0688	0.5562	0.4558
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	1.3321	1.0469	1.6191	0.2032
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	2.7536	1.0242	7.2289	0.0072
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.9479	0.7707	1.5128	0.2187
industry*A5SUM Health And Community Services	Large (100+ employees)	1	0.1524	0.5268	0.0837	0.7723
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	1.0456	1.0647	0.9644	0.3261
industry*A5SUM Manufacturing	Large (100+ employees)	1	1.9346	1.0330	3.5073	0.0611
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.5051	0.5096	0.9824	0.3216
industry*A5SUM Mining	Large (100+ employees)	1	14.6555	594.5	0.0006	0.9803
industry*A5SUM Mining	Medium (10-99 employees)	1	14.8230	1420.0	0.0001	0.9917
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.0583	0.8228	0.0050	0.9435
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	1.0560	1.0593	0.9939	0.3188
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.9171	0.6277	2.1348	0.1440
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.3168	0.4660	0.4620	0.4967
industry*A5SUM Retail Trade	Large (100+ employees)	1	14.5404	660.1	0.0005	0.9824
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	0.2480	0.4201	0.3486	0.5549
industry*A5SUM Transport And Storage	Large (100+ employees)	1	-0.0392	0.4299	0.0083	0.9274
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.5788	0.3995	2.0990	0.1474
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-0.3532	0.8594	0.1689	0.6811
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	1.2116	1.0490	1.3340	0.2481

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.498	0.312 0.793
Year 2007 vs 2009	1.003	0.640 1.571

Association of Predicted Probabilities and Observed Responses

Percent Concordant	68.3	Somers' D	0.412
Percent Discordant	27.1	Gamma	0.432
Percent Tied	4.6	Tau-a	0.110
Pairs	116624	C	0.706

Victoria – Apprentices and trainees

Number of Observations Read 855
 Number of Observations Used 855

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	128	
2	1	727	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	723.965	757.765
SC	728.716	924.054
-2 Log L	721.965	687.765
R-Square	0.0392	Max-rescaled R-Square 0.0688

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	34.1997	34	0.4582
Score	27.7992	34	0.7645
Wald	16.0224	34	0.9962

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	0.2790	0.8698
industry*A5SUM	32	15.5285	0.9937

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.7835	0.2168	67.7077	<.0001
year 2005	1	-0.1269	0.2443	0.2701	0.6033
year 2007	1	-0.0375	0.2382	0.0247	0.8750
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	0.2083	0.6434	0.1048	0.7461
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	-0.6782	0.4755	2.0346	0.1538

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	14.2509	2104.7	0.0000	0.9946
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	-0.1214	0.6591	0.0339	0.8539
industry*A5SUM Construction	Large (100+ employees)	1	-0.5282	0.6829	0.5983	0.4392
industry*A5SUM Construction	Medium (10-99 employees)	1	-0.3489	0.5319	0.4302	0.5119
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	0.2808	0.7743	0.1315	0.7169
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.3489	0.6711	0.2704	0.6031
industry*A5SUM Education	Large (100+ employees)	1	-0.3544	0.5890	0.3620	0.5474
industry*A5SUM Education	Medium (10-99 employees)	1	14.2725	795.1	0.0003	0.9857
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	0.4469	0.6379	0.4908	0.4836
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-0.5911	0.8415	0.4934	0.4824
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	-1.2243	0.5485	4.9814	0.0256
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	14.2608	1124.4	0.0002	0.9899
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	-0.0258	0.5733	0.0020	0.9641
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	14.2866	1487.3	0.0001	0.9923
industry*A5SUM Health And Community Services	Large (100+ employees)	1	-0.0442	0.5209	0.0072	0.9324
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	-0.1085	0.5780	0.0353	0.8511
industry*A5SUM Manufacturing	Large (100+ employees)	1	-0.2638	0.4882	0.2920	0.5890
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	-0.00275	0.4800	0.0000	0.9954
industry*A5SUM Mining	Large (100+ employees)	1	14.2425	1124.6	0.0002	0.9899
industry*A5SUM Mining	Medium (10-99 employees)	1	14.2795	940.8	0.0002	0.9879
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	14.2721	1330.3	0.0001	0.9914
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-0.4274	0.6763	0.3993	0.5275
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.2442	0.6441	0.1437	0.7046
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	0.5004	0.5580	0.8044	0.3698
industry*A5SUM Retail Trade	Large (100+ employees)	1	-0.3461	0.5899	0.3443	0.5573
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	1.5734	1.0350	2.3110	0.1285
industry*A5SUM Transport And Storage	Large (100+ employees)	1	-0.3630	0.4920	0.5444	0.4606
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.1194	0.6600	0.0327	0.8565
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	0.5617	1.0646	0.2783	0.5978
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	0.5783	1.0677	0.2934	0.5881

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.881	0.546 1.422
Year 2007 vs 2009	0.963	0.604 1.536

Association of Predicted Probabilities and Observed Responses

Percent Concordant	61.4	Somers' D	0.271
Percent Discordant	34.3	Gamma	0.283
Percent Tied	4.4	Tau-a	0.069
Pairs	93056	C	0.636

Queensland – Apprentices and trainees

Number of Observations Read 856
 Number of Observations Used 856

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	148	
2	1	708	

Probability modeled is satis10=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	790.291	813.196
SC	795.043	984.277
-2 Log L	788.291	741.196
R-Square	0.0535	Max-rescaled R-Square 0.0889

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	47.0955	35	0.0832
Score	45.4424	35	0.1113
Wald	35.8173	35	0.4299

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	0.0515	0.9746
industry*A5SUM	33	35.8059	0.3381

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.
 industryCan_t_SayA5SUMmedium_10 = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.5271	0.2075	54.1527	<.0001
Year 2005	1	-0.0531	0.2381	0.0498	0.8234
Year 2007	1	-0.0144	0.2257	0.0041	0.9490
industry*A5SUM Accommodation, Cafes And Restaurants	1	1.0164	0.7550	1.8125	0.1782
industry*A5SUM Accommodation, Cafes And Restaurants	1	0.2018	0.5712	0.1248	0.7239
industry*A5SUM Agriculture, Forestry And Fishing	1	-0.5299	0.6998	0.5735	0.4489

industry*A5SUM Agriculture, Forestry And Fishing	Medium (10--99 employees)	1	14.3965	2794.0	0.0000	0.9959
industry*A5SUM Can't Say	Large (100+ employees)	1	14.3434	2794.0	0.0000	0.9959
industry*A5SUM Can't Say	Medium (10--99 employees)	0	0	.	.	.
industry*A5SUM Construction	Large (100+ employees)	1	-0.2641	0.5956	0.1966	0.6575
industry*A5SUM Construction	Medium (10--99 employees)	1	-0.6339	0.4145	2.3385	0.1262
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	-1.3057	0.6360	4.2152	0.0401
industry*A5SUM Cultural And Recreational Services	Medium (10--99 employees)	1	0.9941	1.0574	0.8838	0.3472
industry*A5SUM Education	Large (100+ employees)	1	-0.5497	0.5539	0.9850	0.3210
industry*A5SUM Education	Medium (10--99 employees)	1	-0.1150	0.8097	0.0202	0.8870
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	0.8554	0.7614	1.2621	0.2612
industry*A5SUM Electricity, Gas And Water Supply	Medium (10--99 employees)	1	14.3860	1249.4	0.0001	0.9908
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	14.3531	883.5	0.0003	0.9870
industry*A5SUM Finance And Insurance	Medium (10--99 employees)	1	-0.2891	0.6838	0.1788	0.6724
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.8405	0.4997	2.8293	0.0926
industry*A5SUM Government Administration And Defence	Medium (10--99 employees)	1	0.9056	1.0606	0.7291	0.3932
industry*A5SUM Health And Community Services	Large (100+ employees)	1	1.3287	1.0439	1.6201	0.2031
industry*A5SUM Health And Community Services	Medium (10--99 employees)	1	0.1073	0.5204	0.0425	0.8366
industry*A5SUM Manufacturing	Large (100+ employees)	1	0.1483	0.5188	0.0817	0.7751
industry*A5SUM Manufacturing	Medium (10--99 employees)	1	0.4404	0.5650	0.6076	0.4357
industry*A5SUM Mining	Large (100+ employees)	1	1.4368	1.0425	1.8994	0.1681
industry*A5SUM Mining	Medium (10--99 employees)	1	-0.9975	0.7508	1.7653	0.1840
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.9189	0.5842	2.4741	0.1157
industry*A5SUM Personal And Other Services	Medium (10--99 employees)	1	0.2832	0.7832	0.1307	0.7177
industry*A5SUM Property And Business Services	Large (100+ employees)	1	-0.0354	0.5291	0.0045	0.9466
industry*A5SUM Property And Business Services	Medium (10--99 employees)	1	-0.3262	0.4690	0.4838	0.4867
industry*A5SUM Retail Trade	Large (100+ employees)	1	0.4365	0.6410	0.4637	0.4959
industry*A5SUM Retail Trade	Medium (10--99 employees)	1	0.7932	0.6321	1.5746	0.2095
industry*A5SUM Transport And Storage	Large (100+ employees)	1	-0.2574	0.4960	0.2694	0.6037
industry*A5SUM Transport And Storage	Medium (10--99 employees)	1	-1.0686	0.4613	5.3662	0.0205
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-0.1165	1.1315	0.0106	0.9180
industry*A5SUM Wholesale Trade	Medium (10--99 employees)	1	14.3701	1396.8	0.0001	0.9918

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.948	0.595 1.512
Year 2007 vs 2009	0.986	0.633 1.534

Association of Predicted Probabilities and Observed Responses

Percent Concordant	64.6	Somers' D	0.328
Percent Discordant	31.8	Gamma	0.340
Percent Tied	3.6	Tau-a	0.094
Pairs	104784	C	0.664

South Australia – Apprentices and trainees

Number of Observations Read 588
 Number of Observations Used 588

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	91	
2	1	497	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	508.716	536.818
SC	513.093	690.004
-2 Log L	506.716	466.818
R-Square	0.0656	Max-rescaled R-Square 0.1136

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	39.8975	34	0.2244
Score	31.8898	34	0.5714
Wald	16.7837	34	0.9941

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	1.8945	0.3878
industry*A5SUM	32	15.0487	0.9953

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.9202	0.2852	45.3433	<.0001
year 2005	1	-0.3721	0.2861	1.6921	0.1933
year 2007	1	-0.0685	0.3041	0.0507	0.8218
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	13.1612	511.3	0.0007	0.9795
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	-0.7514	0.6271	1.4355	0.2309

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	13.1981	1022.2	0.0002	0.9897
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	13.3208	1023.3	0.0002	0.9896
industry*A5SUM Construction	Large (100+ employees)	1	13.1918	491.2	0.0007	0.9786
industry*A5SUM Construction	Medium (10-99 employees)	1	-0.8472	0.5754	2.1680	0.1409
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	-0.2091	1.1217	0.0347	0.8522
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.5857	0.7055	0.6894	0.4064
industry*A5SUM Education	Large (100+ employees)	1	0.5980	1.0697	0.3125	0.5761
industry*A5SUM Education	Medium (10-99 employees)	1	13.2751	790.9	0.0003	0.9866
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	13.2491	722.2	0.0003	0.9854
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	13.1612	626.2	0.0004	0.9832
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	0.4886	1.0749	0.2066	0.6494
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	-0.5909	0.7061	0.7002	0.4027
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.3595	0.7820	0.2113	0.6458
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.8136	1.0624	0.5865	0.4438
industry*A5SUM Health And Community Services	Large (100+ employees)	1	-0.5486	0.5569	0.9703	0.3246
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.2385	0.6552	0.1325	0.7159
industry*A5SUM Manufacturing	Large (100+ employees)	1	1.0081	1.0571	0.9093	0.3403
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	-0.4583	0.5125	0.7998	0.3712
industry*A5SUM Mining	Large (100+ employees)	1	13.0473	1257.9	0.0001	0.9917
industry*A5SUM Mining	Medium (10-99 employees)	1	-0.6659	0.8496	0.6143	0.4332
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	13.2090	723.1	0.0003	0.9854
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	0.4516	1.0787	0.1753	0.6755
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.4207	0.7821	0.2894	0.5906
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.5570	0.5583	0.9954	0.3184
industry*A5SUM Retail Trade	Large (100+ employees)	1	-0.9063	0.5362	2.8569	0.0910
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-0.1910	0.5407	0.1248	0.7239
industry*A5SUM Transport And Storage	Large (100+ employees)	1	-0.2532	0.5968	0.1800	0.6714
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.9499	0.6434	2.1795	0.1399
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-0.9631	0.8981	1.1499	0.2836
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	13.1761	1021.3	0.0002	0.9897

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.689	0.393 1.208
Year 2007 vs 2009	0.934	0.515 1.695

Association of Predicted Probabilities and Observed Responses

Percent Concordant	66.4	Somers' D	0.363
Percent Discordant	30.0	Gamma	0.377
Percent Tied	3.6	Tau-a	0.095
Pairs	45227	C	0.682

Western Australia – Apprentices and trainees

Number of Observations Read 686
 Number of Observations Used 686

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	146	
2	1	540	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	712.256	737.073
SC	716.787	895.654
-2 Log L	710.256	667.073
R-Square	0.0610	Max-rescaled R-Square 0.0946

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	43.1834	34	0.1344
Score	35.8146	34	0.3833
Wald	23.4346	34	0.9133

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	6.7307	0.0345
industry*A5SUM	32	16.7752	0.9876

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.4111	0.2378	35.2126	<.0001
year 2005	1	-0.0791	0.2608	0.0920	0.7616
year 2007	1	-0.5482	0.2313	5.6165	0.0178
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	1.0618	0.7652	1.9255	0.1653
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	0.4301	0.5786	0.5524	0.4573

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	14.3236	1809.1	0.0001	0.9937
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	14.5036	1462.9	0.0001	0.9921
industry*A5SUM Construction	Large (100+ employees)	1	0.5616	0.5769	0.9478	0.3303
industry*A5SUM Construction	Medium (10-99 employees)	1	0.2687	0.4599	0.3415	0.5590
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	-0.0363	0.6946	0.0027	0.9583
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	0.1218	0.8149	0.0223	0.8812
industry*A5SUM Education	Large (100+ employees)	1	0.2672	0.6747	0.1568	0.6921
industry*A5SUM Education	Medium (10-99 employees)	1	-0.7893	0.7561	1.0897	0.2965
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	14.5306	1131.9	0.0002	0.9898
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-0.0714	0.8414	0.0072	0.9323
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	-0.4254	0.5806	0.5368	0.4638
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	0.5597	1.1035	0.2573	0.6120
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.7337	0.7835	0.8770	0.3490
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.4070	0.6602	0.3800	0.5376
industry*A5SUM Health And Community Services	Large (100+ employees)	1	-0.1231	0.5157	0.0569	0.8114
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	-0.2952	0.5718	0.2665	0.6057
industry*A5SUM Manufacturing	Large (100+ employees)	1	14.5603	596.7	0.0006	0.9805
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.4061	0.5902	0.4735	0.4914
industry*A5SUM Mining	Large (100+ employees)	1	-0.1014	0.4733	0.0459	0.8303
industry*A5SUM Mining	Medium (10-99 employees)	1	1.2210	1.0624	1.3208	0.2504
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	14.4631	957.7	0.0002	0.9880
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-0.4996	0.8902	0.3150	0.5746
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.3941	0.5838	0.4558	0.4996
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.4103	0.4516	0.8255	0.3636
industry*A5SUM Retail Trade	Large (100+ employees)	1	1.0064	0.7718	1.7006	0.1922
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-0.4047	0.4680	0.7478	0.3872
industry*A5SUM Transport And Storage	Large (100+ employees)	1	0.0203	0.5019	0.0016	0.9678
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.4305	0.5014	0.7374	0.3905
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-0.9300	0.7896	1.3872	0.2389
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	14.2836	2559.0	0.0000	0.9955

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.924	0.554 1.540
Year 2007 vs 2009	0.578	0.367 0.910

Association of Predicted Probabilities and Observed Responses

Percent Concordant	64.0	Somers' D	0.313
Percent Discordant	32.7	Gamma	0.324
Percent Tied	3.4	Tau-a	0.105
Pairs	78840	C	0.656

Tasmania – Apprentices and trainees

Number of Observations Read 661
 Number of Observations Used 661

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	103	
2	1	558	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Covariates	Intercept and Covariates
AIC	574.004	579.004	579.004
SC	578.498	736.285	736.285
-2 Log L	572.004	509.004	509.004
R-Square	0.0909	Max-rescaled R-Square	0.1570

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	63.0001	34	0.0018
Score	59.2804	34	0.0046
Wald	33.2509	34	0.5042

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	7.4292	0.0244
industry*A5SUM	32	28.0632	0.6662

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.8009	0.2614	47.4800	<.0001
year 2005	1	-0.5875	0.2733	4.6199	0.0316
year 2007	1	0.0988	0.3012	0.1076	0.7429
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	-2.0013	0.9429	4.5048	0.0338
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	1.2734	1.0512	1.4672	0.2258

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	-1.0720	0.7637	1.9704	0.1604
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	-1.0428	0.6620	2.4812	0.1152
industry*A5SUM Construction	Large (100+ employees)	1	0.3560	1.0936	0.1060	0.7447
industry*A5SUM Construction	Medium (10-99 employees)	1	0.5836	0.6399	0.8317	0.3618
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	14.4516	1173.6	0.0002	0.9902
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.4505	0.6134	0.5395	0.4626
industry*A5SUM Education	Large (100+ employees)	1	0.7994	1.0657	0.5627	0.4532
industry*A5SUM Education	Medium (10-99 employees)	1	14.4891	659.3	0.0005	0.9825
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	-0.4075	1.1811	0.1190	0.7301
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	14.4658	1439.5	0.0001	0.9920
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	14.2209	1180.5	0.0001	0.9904
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	-0.0469	0.6686	0.0049	0.9440
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	-0.5238	0.5108	1.0515	0.3052
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.8865	1.0588	0.7010	0.4024
industry*A5SUM Health And Community Services	Large (100+ employees)	1	-0.1211	0.5334	0.0515	0.8205
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.4770	0.5695	0.7014	0.4023
industry*A5SUM Manufacturing	Large (100+ employees)	1	14.4650	641.9	0.0005	0.9820
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.9815	0.7602	1.6670	0.1967
industry*A5SUM Mining	Large (100+ employees)	1	-1.1733	0.8963	1.7136	0.1905
industry*A5SUM Mining	Medium (10-99 employees)	1	14.1606	1688.2	0.0001	0.9933
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	0.6418	1.0760	0.3558	0.5509
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	0.3571	0.7813	0.2089	0.6477
industry*A5SUM Property And Business Services	Large (100+ employees)	1	14.1970	918.2	0.0002	0.9877
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.2062	0.5903	0.1220	0.7268
industry*A5SUM Retail Trade	Large (100+ employees)	1	-0.3578	0.6860	0.2720	0.6020
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-0.3490	0.4717	0.5475	0.4593
industry*A5SUM Transport And Storage	Large (100+ employees)	1	14.7481	1688.2	0.0001	0.9930
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	0.5603	0.7776	0.5192	0.4712
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-2.8228	1.1809	5.7140	0.0168
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	-0.9306	0.7401	1.5811	0.2086

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.556	0.325 0.950
Year 2007 vs 2009	1.104	0.612 1.992

Association of Predicted Probabilities and Observed Responses

Percent Concordant	68.3	Somers' D	0.408
Percent Discordant	27.5	Gamma	0.425
Percent Tied	4.1	Tau-a	0.107
Pairs	57474	C	0.704

Northern Territory – Apprentices and trainees

Number of Observations Read 430
 Number of Observations Used 430

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	76	
2	1	354	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.
 WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	403.122	433.304
SC	407.185	563.345
-2 Log L	401.122	369.304
R-Square	0.0713	Max-rescaled R-Square 0.1176

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	31.8172	31	0.4256
Score	25.9245	31	0.7249
Wald	9.5468	31	0.9999

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	1.7252	0.4221
industry*A5SUM	29	7.3161	1.0000

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

industryConstructionA5SUMLarge__ = 0
 industryElectricity__Gas_And_Wat = 0
 industryElectricity__Gas_And_Wa2 = 0

Analysis of Maximum Likelihood Estimates

Standard Wald

Parameter	DF	Estimate	Error	Chi-Square	Pr > ChiSq
Intercept	1	1.1668	0.2708	18.5674	<.0001
Year 2005	1	0.4432	0.3385	1.7148	0.1904
Year 2007	1	0.1612	0.3195	0.2546	0.6139
industry*A5SUM Accommodation, Cafes And Restaurants	1	12.3934	452.9	0.0007	0.9782
industry*A5SUM Accommodation, Cafes And Restaurants	1	-0.6025	0.7398	0.6633	0.4154
industry*A5SUM Agriculture, Forestry And Fishing	1	12.5234	719.9	0.0003	0.9861
industry*A5SUM Agriculture, Forestry And Fishing	1	-0.3182	0.8653	0.1353	0.7130
industry*A5SUM Construction	0	0	.	.	.
industry*A5SUM Construction	1	0.4200	0.4978	0.7119	0.3988
industry*A5SUM Cultural And Recreational Services	1	12.2414	719.9	0.0003	0.9864
industry*A5SUM Cultural And Recreational Services	1	-0.8995	0.7613	1.3962	0.2374
industry*A5SUM Education	1	0.2523	1.1158	0.0511	0.8211
industry*A5SUM Education	1	0.7650	1.0781	0.5035	0.4780
industry*A5SUM Electricity, Gas And Water Supply	0	0	.	.	.
industry*A5SUM Electricity, Gas And Water Supply	0	0	.	.	.
industry*A5SUM Finance And Insurance	1	-16.4729	1943.9	0.0001	0.9932
industry*A5SUM Finance And Insurance	1	-0.1556	0.8290	0.0352	0.8511
industry*A5SUM Government Administration And Defence	1	0.0143	0.6017	0.0006	0.9810
industry*A5SUM Government Administration And Defence	1	0.9616	1.0672	0.8119	0.3676
industry*A5SUM Health And Community Services	1	0.0165	0.6770	0.0006	0.9806
industry*A5SUM Health And Community Services	1	0.3435	0.7967	0.1859	0.6664
industry*A5SUM Manufacturing	1	12.5444	584.0	0.0005	0.9829
industry*A5SUM Manufacturing	1	0.6221	0.6502	0.9157	0.3386
industry*A5SUM Mining	1	12.5883	414.0	0.0009	0.9757
industry*A5SUM Mining	1	12.5234	1018.1	0.0002	0.9902
industry*A5SUM Personal And Other Services	1	12.3980	583.7	0.0005	0.9831
industry*A5SUM Personal And Other Services	1	-0.5696	0.8962	0.4040	0.5250
industry*A5SUM Property And Business Services	1	12.5687	320.5	0.0015	0.9687
industry*A5SUM Property And Business Services	1	-0.4488	0.6381	0.4948	0.4818
industry*A5SUM Retail Trade	1	12.4850	357.9	0.0012	0.9722
industry*A5SUM Retail Trade	1	0.2481	0.6628	0.1402	0.7081
industry*A5SUM Transport And Storage	1	12.4978	507.1	0.0006	0.9803
industry*A5SUM Transport And Storage	1	0.3760	0.7919	0.2254	0.6350
industry*A5SUM Wholesale Trade	1	12.5234	1018.1	0.0002	0.9902
industry*A5SUM Wholesale Trade	1	-0.3211	1.1767	0.0745	0.7849

Odds Ratio Estimates
Point 95% Wald

Effect	Estimate	Confidence Limits
Year 2005 vs 2009	1.558	0.802 3.024
Year 2007 vs 2009	1.175	0.628 2.198
Association of Predicted Probabilities and Observed Responses		
Percent Concordant	63.4	Somers' D 0.331
Percent Discordant	30.3	Gamma 0.353
Percent Tied	6.3	Tau-a 0.097
Pairs	26904	c 0.666

Australian Capital Territory – Apprentices and trainees

Number of Observations Read 482
 Number of Observations Used 482

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	91	
2	1	391	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	469.032	481.693
SC	473.210	615.387
-2 Log L	467.032	417.693
R-Square	0.0973	Max-rescaled R-Square 0.1568

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	49.3397	31	0.0195
Score	41.1200	31	0.1057
Wald	22.0239	31	0.8823

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	10.9404	0.0042
industry*ASSUM	29	10.8816	0.9991

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

industryWholesale_TradeASSUMMedi = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Wald Pr > ChiSq
Intercept	1	1.4880	0.2625	32.1356	<.0001
year 2005	1	-0.8995	0.3008	8.9454	0.0028
year 2007	1	-0.1265	0.3226	0.1539	0.6949

industry*A5SUM Accommodation, Cafes And Restaurants	Large (100+ employees)	1	0.8803	1.0958	0.6453	0.4218
industry*A5SUM Accommodation, Cafes And Restaurants	Medium (10-99 employees)	1	0.6145	0.6571	0.8747	0.3497
industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	12.7857	676.2	0.0004	0.9849
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	12.4335	699.9	0.0003	0.9858
industry*A5SUM Construction	Large (100+ employees)	1	12.4335	699.9	0.0003	0.9858
industry*A5SUM Construction	Medium (10-99 employees)	1	0.5497	0.6538	0.7069	0.4005
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	12.7195	303.1	0.0018	0.9665
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.4874	0.7681	0.4027	0.5257
industry*A5SUM Education	Large (100+ employees)	1	0.4570	0.6794	0.4525	0.5012
industry*A5SUM Education	Medium (10-99 employees)	1	12.7924	266.4	0.0023	0.9617
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	12.3070	989.8	0.0002	0.9901
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	12.3070	989.8	0.0002	0.9901
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	13.2065	989.8	0.0002	0.9894
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	1.2554	1.0713	1.3734	0.2412
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	12.5108	280.0	0.0020	0.9644
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	-0.9749	1.4536	0.4498	0.5024
industry*A5SUM Health And Community Services	Large (100+ employees)	1	2.0805	1.0384	4.0142	0.0451
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.8590	0.6454	1.7712	0.1832
industry*A5SUM Manufacturing	Large (100+ employees)	1	0.3098	1.1287	0.0754	0.7837
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.1079	0.6851	0.0248	0.8749
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.0994	1.1865	0.0070	0.9333
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	0.1239	0.8505	0.0212	0.8842
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.4222	0.8128	0.2698	0.6035
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.0122	0.5434	0.0005	0.9821
industry*A5SUM Retail Trade	Large (100+ employees)	1	0.8860	1.0841	0.6679	0.4138
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-0.0743	0.4515	0.0271	0.8692
industry*A5SUM Transport And Storage	Large (100+ employees)	1	13.2065	989.8	0.0002	0.9894
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.1535	0.6994	0.0482	0.8263
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-15.4610	1696.5	0.0001	0.9927
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	0	0	.	.	.

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.407	0.226 0.733
Year 2007 vs 2009	0.881	0.468 1.658

Association of Predicted Probabilities and Observed Responses

Percent Concordant	67.4	Somers' D	0.414
Percent Discordant	25.9	Gamma	0.444
Percent Tied	6.7	Tau-a	0.127
Pairs	35581	C	0.707

New South Wales – Nationally recognised training

Number of Observations Read 958
 Number of Observations Used 958

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	141	
2	1	817	

Probability modeled is satis10=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	802.484	835.989
SC	807.349	1006.259
-2 Log L	800.484	765.989
R-Square	0.0354	Max-rescaled R-Square 0.0624

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	34.4948	34	0.4441
Score	32.4170	34	0.5453
Wald	29.2699	34	0.6987

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	7.8678	0.0196
industry*A5SUM	32	22.2330	0.9010

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	2.0524	0.2218	85.6162	<.0001
Year 2005	1	-0.6434	0.2451	6.8908	0.0087
Year 2007	1	-0.5199	0.2319	5.0269	0.0250
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	1.4759	1.0357	2.0305	0.1542
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	-0.0104	0.7908	0.0002	0.9895
industry*A5SUM Agriculture, Forestry And Fishing Large (100+ employees)	1	0.2344	1.0964	0.0457	0.8307

industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	-0.2921	0.8128	0.1292	0.7193
industry*A5SUM Construction	Large (100+ employees)	1	0.5747	1.0664	0.2905	0.5899
industry*A5SUM Construction	Medium (10-99 employees)	1	0.4874	0.7667	0.4042	0.5249
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	-0.5126	0.6947	0.5445	0.4606
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.4089	0.5006	0.6673	0.4140
industry*A5SUM Education	Large (100+ employees)	1	-0.4315	0.5998	0.5175	0.4719
industry*A5SUM Education	Medium (10-99 employees)	1	0.5254	0.7687	0.4671	0.4943
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	1.3239	1.0442	1.6075	0.2048
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-0.0466	1.1346	0.0017	0.9672
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	-0.4340	0.5366	0.6542	0.4186
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	-0.00762	0.5205	0.0002	0.9883
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.9307	0.5476	2.8885	0.0892
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.4511	0.7703	0.3429	0.5581
industry*A5SUM Health And Community Services	Large (100+ employees)	1	0.4214	0.6369	0.4378	0.5082
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.7818	0.7581	1.0635	0.3024
industry*A5SUM Manufacturing	Large (100+ employees)	1	-0.3577	0.5356	0.4460	0.5043
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.8492	0.7579	1.2555	0.2625
industry*A5SUM Mining	Large (100+ employees)	1	0.1698	0.6483	0.0686	0.7934
industry*A5SUM Mining	Medium (10-99 employees)	1	0.5871	1.0704	0.3008	0.5834
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	0.1512	0.7815	0.0374	0.8466
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-0.1907	0.8047	0.0562	0.8126
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.2430	0.5082	0.2287	0.6325
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.5523	0.4203	1.7269	0.1888
industry*A5SUM Retail Trade	Large (100+ employees)	1	-0.3464	0.6778	0.2611	0.6094
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-0.2829	0.4911	0.3318	0.5646
industry*A5SUM Transport And Storage	Large (100+ employees)	1	0.9958	0.7520	1.7535	0.1854
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	0.1025	0.4755	0.0465	0.8293
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	12.3897	546.4	0.0005	0.9819
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	-0.8114	0.5640	2.0701	0.1502

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.526	0.325 0.850
Year 2007 vs 2009	0.595	0.377 0.937

Association of Predicted Probabilities and Observed Responses

Percent Concordant	62.5	Somers' D	0.291
Percent Discordant	33.5	Gamma	0.303
Percent Tied	4.0	Tau-a	0.073
Pairs	115197	C	0.645

Victoria – Nationally recognised training

Number of Observations Read 788
 Number of Observations Used 788

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	109	
2	1	679	

Probability modeled is satis10=1.

Model Convergence Status
 Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	635.412	675.743
SC	640.081	839.175
-2 Log L	633.412	605.743
R-Square	0.0345	Max-rescaled R-Square 0.0625

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	27.6691	34	0.7701
Score	27.8999	34	0.7602
Wald	21.9724	34	0.9446

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Wald	Pr > ChiSq
Year	2	1.9676		0.3739
industry*A5SUM	32	20.2959		0.9459

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Wald	Pr > ChiSq
Intercept	1	1.9720	0.2492	62.6318		<.0001
Year 2005	1	-0.3465	0.2684	1.6668		0.1967
Year 2007	1	-0.2834	0.2606	1.1820		0.2770
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	1.1484	1.0484	1.2000		0.2733
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	0.7438	1.0602	0.4922		0.4830
industry*A5SUM Agriculture, Forestry And Fishing Large (100+ employees)	1	-0.8403	0.8692	0.9345		0.3337

industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	0.6564	1.0677	0.3780	0.5387
industry*A5SUM Construction	Large (100+ employees)	1	-0.0340	0.7995	0.0018	0.9660
industry*A5SUM Construction	Medium (10-99 employees)	1	0.3798	0.7783	0.2381	0.6256
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	0.5557	0.7730	0.5168	0.4722
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.3014	0.6765	0.1986	0.6559
industry*A5SUM Education	Large (100+ employees)	1	0.2882	0.7812	0.1361	0.7122
industry*A5SUM Education	Medium (10-99 employees)	1	0.0169	0.6652	0.0006	0.9797
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	0.0873	0.5843	0.0223	0.8812
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	0.2496	1.0936	0.0521	0.8194
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	-0.4746	0.5532	0.7360	0.3910
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	-0.2886	0.6782	0.1811	0.6704
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	-0.4925	0.5498	0.8024	0.3704
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	14.2854	1023.0	0.0002	0.9889
industry*A5SUM Health And Community Services	Large (100+ employees)	1	0.3222	0.5738	0.3154	0.5744
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	1.3857	1.0429	1.7652	0.1840
industry*A5SUM Manufacturing	Large (100+ employees)	1	0.1753	0.5775	0.0921	0.7615
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.0857	0.6614	0.0168	0.8969
industry*A5SUM Mining	Large (100+ employees)	1	14.2607	1161.7	0.0002	0.9902
industry*A5SUM Mining	Medium (10-99 employees)	1	0.5677	1.0720	0.2804	0.5964
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-1.6341	0.7997	4.1754	0.0410
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-0.4584	0.8328	0.3030	0.5820
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.1472	0.5809	0.0642	0.7999
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.1718	0.4279	0.1611	0.6882
industry*A5SUM Retail Trade	Large (100+ employees)	1	-1.2674	0.6145	4.2536	0.0392
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	0.6849	1.0645	0.4139	0.5200
industry*A5SUM Transport And Storage	Large (100+ employees)	1	0.2980	0.6493	0.2106	0.6463
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	0.3288	0.7824	0.1766	0.6743
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-0.4525	0.8208	0.3039	0.5814
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	0.2921	0.7806	0.1400	0.7083

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.707	0.418 1.197
Year 2007 vs 2009	0.753	0.452 1.255

Association of Predicted Probabilities and Observed Responses

Percent Concordant	62.6	Somers' D	0.285
Percent Discordant	34.1	Gamma	0.295
Percent Tied	3.3	Tau-a	0.068
Pairs	74011	C	0.642

Queensland – Nationally recognised training

Number of Observations Read 750
 Number of Observations Used 750

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	128	
2	1	622	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.
 WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	687.413	699.380
SC	692.033	865.703
-2 Log L	685.413	627.380
R-Square	0.0745	Max-rescaled R-Square 0.1243

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	58.0325	35	0.0085
Score	47.1327	35	0.0826
Wald	27.0355	35	0.8300

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	2.8836	0.2365
industry*ASUM	33	24.4825	0.8580

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.
 industryCan_t_SayA5SUMMedium__10 = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.3394	0.2274	34.6931	<.0001

year	2005	1	-0.4296	0.2531	2.8814	0.0896
year	2007	1	-0.2029	0.2579	0.6193	0.4313
industry*A5SUM	Accommodation, Cafes And Restaurants	1	1.8601	1.0396	3.2013	0.0736
industry*A5SUM	Accommodation, Cafes And Restaurants	1	0.9244	0.7737	1.4272	0.2322
industry*A5SUM	Agriculture, Forestry And Fishing	1	-0.7004	0.7594	0.8508	0.3563
industry*A5SUM	Agriculture, Forestry And Fishing	1	0.5993	1.1125	0.2902	0.5901
industry*A5SUM	Can't Say	1	14.5424	2809.8	0.0000	0.9959
industry*A5SUM	Can't Say	0	0	.	.	.
industry*A5SUM	Construction	1	0.7446	0.7790	0.9137	0.3391
industry*A5SUM	Construction	1	14.7448	641.6	0.0005	0.9817
industry*A5SUM	Cultural And Recreational Services	1	-0.0559	0.8588	0.0042	0.9481
industry*A5SUM	Cultural And Recreational Services	1	1.2849	1.0655	1.4540	0.2279
industry*A5SUM	Education	1	0.6849	0.7864	0.7583	0.3838
industry*A5SUM	Education	1	14.8166	721.2	0.0004	0.9836
industry*A5SUM	Electricity, Gas And Water Supply	1	0.6511	0.6511	1.0000	0.3173
industry*A5SUM	Electricity, Gas And Water Supply	1	0.4766	1.1380	0.1754	0.6754
industry*A5SUM	Finance And Insurance	1	0.1322	0.6768	0.0382	0.8451
industry*A5SUM	Finance And Insurance	1	0.2121	0.6708	0.1000	0.7518
industry*A5SUM	Government Administration And Defence	1	0.7688	0.4426	3.0168	0.0824
industry*A5SUM	Government Administration And Defence	1	0.5898	0.7895	0.5580	0.4551
industry*A5SUM	Health And Community Services	1	0.8599	0.6404	1.8030	0.1793
industry*A5SUM	Health And Community Services	1	0.2329	0.4940	0.2222	0.6373
industry*A5SUM	Manufacturing	1	0.5948	0.5719	1.0816	0.2983
industry*A5SUM	Manufacturing	1	14.7404	679.2	0.0005	0.9827
industry*A5SUM	Mining	1	1.0065	0.7711	1.7039	0.1918
industry*A5SUM	Mining	1	0.2921	0.6716	0.1892	0.6636
industry*A5SUM	Personal And Other Services	1	-0.6814	0.5487	1.5423	0.2143
industry*A5SUM	Personal And Other Services	1	14.6524	807.3	0.0003	0.9855
industry*A5SUM	Property And Business Services	1	0.7781	0.5681	1.8757	0.1708
industry*A5SUM	Property And Business Services	1	0.1072	0.4983	0.0462	0.8297
industry*A5SUM	Retail Trade	1	-0.1567	0.5524	0.0805	0.7767
industry*A5SUM	Retail Trade	1	1.8208	1.0435	3.0449	0.0810
industry*A5SUM	Transport And Storage	1	-0.2465	0.4854	0.2579	0.6116
industry*A5SUM	Transport And Storage	1	1.7481	1.0435	2.8062	0.0939
industry*A5SUM	Wholesale Trade	1	14.6459	1983.7	0.0001	0.9941
industry*A5SUM	Wholesale Trade	1	-0.1740	0.8571	0.0412	0.8391

Odds Ratio Estimates
Point Estimate 95% Wald Confidence Limits

year 2005 vs 2009 0.651 0.396 1.069
year 2007 vs 2009 0.816 0.492 1.353

Association of Predicted Probabilities and Observed Responses

Percent Concordant 67.1 Somers' D 0.379
Percent Discordant 29.2 Gamma 0.393
Percent Tied 3.7 Tau-a 0.107
Pairs 79616 c 0.689

South Australia – Nationally recognised training

Number of Observations Read 597
 Number of Observations Used 597

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	88	
2	1	509	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	501.306	530.163
SC	505.698	683.881
-2 Log L	499.306	460.163
R-Square	0.0635	Max-rescaled R-Square 0.1120

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	39.1423	34	0.2499
Score	33.7979	34	0.4775
Wald	21.6689	34	0.9499

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	6.0641	0.0482
industry*A5SUM	32	18.2616	0.9753

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	2.5921	0.3454	56.3093	<.0001
Year 2005	1	-0.7465	0.3101	5.7942	0.0161
Year 2007	1	-0.2805	0.3195	0.7705	0.3801
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	12.7877	631.7	0.0004	0.9838
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	-0.2948	1.1189	0.0694	0.7922

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	12.7781	1033.3	0.0002	0.9901
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	-0.9664	1.1927	0.6566	0.4178
industry*A5SUM Construction	Large (100+ employees)	1	-0.8195	0.8418	0.9479	0.3303
industry*A5SUM Construction	Medium (10-99 employees)	1	-0.9687	0.6359	2.3204	0.1277
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	12.4187	1285.4	0.0001	0.9923
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.8096	0.8501	0.9070	0.3409
industry*A5SUM Education	Large (100+ employees)	1	0.4309	1.0722	0.1615	0.6878
industry*A5SUM Education	Medium (10-99 employees)	1	-0.9218	0.6411	2.0676	0.1505
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	-0.3644	1.1186	0.1061	0.7446
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	12.8315	595.4	0.0005	0.9828
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	-0.4931	0.8159	0.3652	0.5456
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	0.3081	1.0779	0.0817	0.7750
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	12.6791	420.9	0.0009	0.9760
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	-0.5583	0.6934	0.6481	0.4208
industry*A5SUM Health And Community Services	Large (100+ employees)	1	-1.4459	0.5333	7.3508	0.0067
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	-0.4836	0.5570	0.7537	0.3853
industry*A5SUM Manufacturing	Large (100+ employees)	1	-0.6312	0.6954	0.8240	0.3640
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	-1.6392	0.5812	7.9540	0.0048
industry*A5SUM Mining	Large (100+ employees)	1	12.5637	906.6	0.0002	0.9889
industry*A5SUM Mining	Medium (10-99 employees)	1	-0.6496	0.8266	0.6177	0.4319
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.9664	1.1927	0.6566	0.4178
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-0.1014	1.1001	0.0085	0.9266
industry*A5SUM Property And Business Services	Large (100+ employees)	1	-0.8876	0.5747	2.3858	0.1224
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	-0.7030	0.5314	1.7504	0.1858
industry*A5SUM Retail Trade	Large (100+ employees)	1	-1.4936	0.6633	5.0706	0.0243
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	-0.4374	0.6835	0.4096	0.5222
industry*A5SUM Transport And Storage	Large (100+ employees)	1	-0.6136	0.6126	1.0032	0.3165
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.1864	0.8023	0.0540	0.8162
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-1.0246	1.1950	0.7351	0.3912
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	12.7429	795.6	0.0003	0.9872

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.474	0.258 0.871
Year 2007 vs 2009	0.755	0.404 1.413

Association of Predicted Probabilities and Observed Responses

Percent Concordant	66.4	Somers' D	0.356
Percent Discordant	30.7	Gamma	0.367
Percent Tied	2.9	Tau-a	0.090
Pairs	44792	C	0.678

Western Australia – Nationally recognised training

Number of Observations Read 705
 Number of Observations Used 705

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	87	
2	1	618	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	528.851	560.539
SC	533.409	720.076
-2 Log L	526.851	490.539
R-Square	0.0502	Max-rescaled R-Square 0.0954

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	36.3122	34	0.3614
Score	32.1760	34	0.5572
Wald	26.8620	34	0.8030

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	16.5176	0.0003
industry*A5SUM	32	10.5282	0.9999

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	2.5851	0.3383	58.3851	<.0001
year 2005	1	-1.3693	0.3450	15.7497	<.0001
year 2007	1	-1.1602	0.3419	11.5151	0.0007
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	0.4679	0.7845	0.3557	0.5509
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	0.2845	0.7947	0.1282	0.7203

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	13.1807	833.4	0.0003	0.9874
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	-0.3522	1.1636	0.0916	0.7621
industry*A5SUM Construction	Large (100+ employees)	1	1.4344	1.0473	1.8757	0.1708
industry*A5SUM Construction	Medium (10-99 employees)	1	0.2806	0.6622	0.1796	0.6718
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	0.6321	1.0846	0.3397	0.5600
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	0.7529	1.0772	0.4885	0.4846
industry*A5SUM Education	Large (100+ employees)	1	0.4173	0.7910	0.2783	0.5978
industry*A5SUM Education	Medium (10-99 employees)	1	0.0657	0.8059	0.0067	0.9350
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	-0.0625	1.1333	0.0030	0.9560
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	0.2005	1.1132	0.0325	0.8570
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	0.8260	0.7725	1.1436	0.2849
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	0.0732	0.6692	0.0120	0.9129
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	0.1596	0.6733	0.0562	0.8126
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.7298	0.7824	0.8700	0.3510
industry*A5SUM Health And Community Services	Large (100+ employees)	1	1.5995	1.0451	2.3423	0.1259
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.3676	0.6601	0.3101	0.5776
industry*A5SUM Manufacturing	Large (100+ employees)	1	1.0066	1.0649	0.8936	0.3445
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.1527	0.7995	0.0365	0.8485
industry*A5SUM Mining	Large (100+ employees)	1	0.6970	0.7754	0.8081	0.3687
industry*A5SUM Mining	Medium (10-99 employees)	1	0.4057	0.7896	0.2640	0.6074
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.3522	1.1636	0.0916	0.7621
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	-0.9408	0.9224	1.0402	0.3078
industry*A5SUM Property And Business Services	Large (100+ employees)	1	0.1109	0.6656	0.0278	0.8677
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	0.4266	0.5251	0.6603	0.4165
industry*A5SUM Retail Trade	Large (100+ employees)	1	0.2064	0.7965	0.0671	0.7956
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	0.7461	1.0701	0.4862	0.4856
industry*A5SUM Transport And Storage	Large (100+ employees)	1	0.6830	0.7762	0.7743	0.3789
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	-0.0243	0.5950	0.0017	0.9675
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	13.3935	840.5	0.0003	0.9873
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	12.5861	1137.2	0.0001	0.9912

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.254	0.129 0.500
Year 2007 vs 2009	0.313	0.160 0.613

Association of Predicted Probabilities and Observed Responses

Percent Concordant	66.7	Somers' D	0.372
Percent Discordant	29.5	Gamma	0.387
Percent Tied	3.8	Tau-a	0.081
Pairs	53766	C	0.686

Tasmania – Nationally recognised training

Number of Observations Read 566
 Number of Observations Used 566

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	94	
2	1	472	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Covariates	Intercept and Covariates
AIC	510.961	547.915	
SC	515.300	699.765	
-2 Log L	508.961	477.915	
R-Square	0.0534	Max-rescaled R-Square	0.0900

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	31.0463	34	0.6132
Score	28.5929	34	0.7297
Wald	19.4330	34	0.9786

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	3.0268	0.2202
industry*A5SUM	32	17.4593	0.9828

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.7754	0.2806	40.0356	<.0001
Year 2005	1	-0.4669	0.2860	2.6659	0.1025
Year 2007	1	-0.1041	0.3144	0.1096	0.7406
industry*A5SUM Accommodation, Cafes And Restaurants Large (100+ employees)	1	-0.1866	1.1440	0.0266	0.8705
industry*A5SUM Accommodation, Cafes And Restaurants Medium (10-99 employees)	1	-0.2881	0.6884	0.1751	0.6756

industry*A5SUM Agriculture, Forestry And Fishing	Large (100+ employees)	1	-1.1579	0.9406	1.5155	0.2183
industry*A5SUM Agriculture, Forestry And Fishing	Medium (10-99 employees)	1	0.2489	1.1027	0.0509	0.8214
industry*A5SUM Construction	Large (100+ employees)	1	13.3624	605.8	0.0005	0.9824
industry*A5SUM Construction	Medium (10-99 employees)	1	0.2310	0.6567	0.1238	0.7250
industry*A5SUM Cultural And Recreational Services	Large (100+ employees)	1	0.3146	1.1025	0.0814	0.7754
industry*A5SUM Cultural And Recreational Services	Medium (10-99 employees)	1	-0.0882	0.6738	0.0171	0.8958
industry*A5SUM Education	Large (100+ employees)	1	-0.1963	0.8193	0.0574	0.8106
industry*A5SUM Education	Medium (10-99 employees)	1	1.4027	1.0486	1.7893	0.1810
industry*A5SUM Electricity, Gas And Water Supply	Large (100+ employees)	1	-0.4061	1.1770	0.1191	0.7300
industry*A5SUM Electricity, Gas And Water Supply	Medium (10-99 employees)	1	-0.8396	0.8974	0.8753	0.3495
industry*A5SUM Finance And Insurance	Large (100+ employees)	1	13.3136	647.6	0.0004	0.9836
industry*A5SUM Finance And Insurance	Medium (10-99 employees)	1	-0.1000	0.6748	0.0220	0.8822
industry*A5SUM Government Administration And Defence	Large (100+ employees)	1	-0.3434	0.5488	0.3914	0.5316
industry*A5SUM Government Administration And Defence	Medium (10-99 employees)	1	0.3464	0.7870	0.1937	0.6598
industry*A5SUM Health And Community Services	Large (100+ employees)	1	-0.2544	0.5446	0.2182	0.6404
industry*A5SUM Health And Community Services	Medium (10-99 employees)	1	0.0683	0.4934	0.0192	0.8899
industry*A5SUM Manufacturing	Large (100+ employees)	1	0.7120	0.7748	0.8444	0.3581
industry*A5SUM Manufacturing	Medium (10-99 employees)	1	0.1791	0.7943	0.0508	0.8216
industry*A5SUM Mining	Large (100+ employees)	1	-1.7059	0.8518	4.0111	0.0452
industry*A5SUM Mining	Medium (10-99 employees)	1	-0.6502	1.1808	0.3032	0.5819
industry*A5SUM Personal And Other Services	Large (100+ employees)	1	-0.6199	0.8644	0.5143	0.4733
industry*A5SUM Personal And Other Services	Medium (10-99 employees)	1	0.7266	1.0720	0.4594	0.4979
industry*A5SUM Property And Business Services	Large (100+ employees)	1	13.2217	543.5	0.0006	0.9806
industry*A5SUM Property And Business Services	Medium (10-99 employees)	1	0.7003	0.7725	0.8217	0.3647
industry*A5SUM Retail Trade	Large (100+ employees)	1	-0.4684	0.7001	0.4477	0.5034
industry*A5SUM Retail Trade	Medium (10-99 employees)	1	0.4276	0.7810	0.2998	0.5840
industry*A5SUM Transport And Storage	Large (100+ employees)	1	13.4478	987.5	0.0002	0.9891
industry*A5SUM Transport And Storage	Medium (10-99 employees)	1	0.5051	0.7787	0.4208	0.5165
industry*A5SUM Wholesale Trade	Large (100+ employees)	1	-1.6070	1.0266	2.4503	0.1175
industry*A5SUM Wholesale Trade	Medium (10-99 employees)	1	-0.9781	1.2575	0.6050	0.4367

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.627	0.358 1.098
Year 2007 vs 2009	0.901	0.487 1.669

Association of Predicted Probabilities and Observed Responses

Percent Concordant	63.0	Somers' D	0.304
Percent Discordant	32.6	Gamma	0.318
Percent Tied	4.3	Tau-a	0.084
Pairs	44368	C	0.652

Northern Territory – Nationally recognised training

Number of Observations Read 433
 Number of Observations Used 433

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	79	
2	1	354	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.
 WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	413.424	435.445
SC	417.495	569.780
-2 Log L	411.424	369.445
R-Square	0.0924	Max-rescaled R-Square 0.1506

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	41.9787	32	0.1115
Score	38.0345	32	0.2137
Wald	19.6533	32	0.9570

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
Year	2	6.7551	0.0341
industry*ASUM	30	14.9201	0.9902

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

industryConstructionASUMLarge__ = 0
 industryElectricity__Gas_And_Wat = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Wald Pr > ChiSq

Intercept	1	1.8304	0.3086	35.1888	<.0001
Year 2005	1	-0.6981	0.3412	4.1865	0.0407
Year 2007	1	-0.8740	0.3499	6.2381	0.0125
industry*A5SUM Accommodation, Cafes And Restaurants	1	12.6484	405.2	0.0010	0.9751
industry*A5SUM Accommodation, Cafes And Restaurants	1	0.6207	1.0965	0.3204	0.5713
industry*A5SUM Agriculture, Forestry And Fishing	1	12.8678	710.2	0.0003	0.9855
industry*A5SUM Agriculture, Forestry And Fishing	1	-0.2729	0.8576	0.1013	0.7503
industry*A5SUM Construction	0	0	.	.	.
industry*A5SUM Construction	1	-0.2445	0.4869	0.2521	0.6156
industry*A5SUM Cultural And Recreational Services	1	12.6919	710.2	0.0003	0.9857
industry*A5SUM Cultural And Recreational Services	1	-1.6486	0.6870	5.7583	0.0164
industry*A5SUM Education	1	0.3148	1.1235	0.0785	0.7793
industry*A5SUM Education	1	0.9332	0.7800	1.4312	0.2316
industry*A5SUM Electricity, Gas And Water Supply	0	0	.	.	.
industry*A5SUM Electricity, Gas And Water Supply	1	12.7806	709.1	0.0003	0.9856
industry*A5SUM Finance And Insurance	1	-15.9668	1817.5	0.0001	0.9930
industry*A5SUM Finance And Insurance	1	0.3993	0.8065	0.2451	0.6206
industry*A5SUM Government Administration And Defence	1	-0.4225	0.6300	0.4497	0.5025
industry*A5SUM Government Administration And Defence	1	0.6279	0.7922	0.6283	0.4280
industry*A5SUM Health And Community Services	1	1.5975	1.0530	2.3014	0.1293
industry*A5SUM Health And Community Services	1	0.3125	0.5398	0.3351	0.5627
industry*A5SUM Manufacturing	1	12.3691	698.4	0.0003	0.9859
industry*A5SUM Manufacturing	1	0.3384	0.8219	0.1695	0.6806
industry*A5SUM Mining	1	12.3420	439.2	0.0008	0.9776
industry*A5SUM Mining	1	0.0939	1.1505	0.0067	0.9350
industry*A5SUM Personal And Other Services	1	-0.6524	1.2597	0.2683	0.6045
industry*A5SUM Personal And Other Services	1	12.3001	441.8	0.0008	0.9778
industry*A5SUM Property And Business Services	1	-0.1851	0.8407	0.0485	0.8258
industry*A5SUM Property And Business Services	1	0.5915	0.6632	0.7954	0.3725
industry*A5SUM Retail Trade	1	12.4357	400.1	0.0010	0.9752
industry*A5SUM Retail Trade	1	0.5893	0.8020	0.5399	0.4625
industry*A5SUM Transport And Storage	1	12.6267	493.4	0.0007	0.9796
industry*A5SUM Transport And Storage	1	0.4685	0.6697	0.4893	0.4842
industry*A5SUM Wholesale Trade	1	12.8678	1004.3	0.0002	0.9898
industry*A5SUM Wholesale Trade	1	12.1919	495.4	0.0006	0.9804

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
Year 2005 vs 2009	0.498	0.255 0.971
Year 2007 vs 2009	0.417	0.210 0.828

Association of Predicted Probabilities and Observed Responses

Percent Concordant	68.0	Somers' D	0.410
Percent Discordant	27.0	Gamma	0.432
Percent Tied	5.0	Tau-a	0.123
Pairs	27966	C	0.705

Australian Capital Territory – Nationally recognised training

Number of Observations Read 522
 Number of Observations Used 522

Response Profile

Ordered Value	satis10	Frequency	Total
1	0	73	
2	1	449	

Probability modeled is satis10=1.

Model Convergence Status

Quasi-complete separation of data points detected.

WARNING: The maximum likelihood estimate may not exist.

WARNING: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics

Criterion	Intercept Only	Covariates	Intercept and Covariates
AIC	424.491	437.360	
SC	428.749	569.348	
-2 Log L	422.491	375.360	
R-Square	0.0863	Max-rescaled R-Square	0.1556

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	47.1308	30	0.0242
Score	39.8626	30	0.1076
Wald	14.6310	30	0.9917

Type 3 Analysis of Effects

Effect	DF	Chi-Square	Pr > ChiSq
year	2	0.4340	0.8049
industry*A5SUM	28	14.0036	0.9872

NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

industryAgriculture__Forestry_A2 = 0
 industryWholesale_TradeA5SUMLarg = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Chi-Square	Pr > ChiSq
Intercept	1	1.4677	0.2634	31.0502	<.0001
year	1	-0.1406	0.3114	0.2040	0.6515

