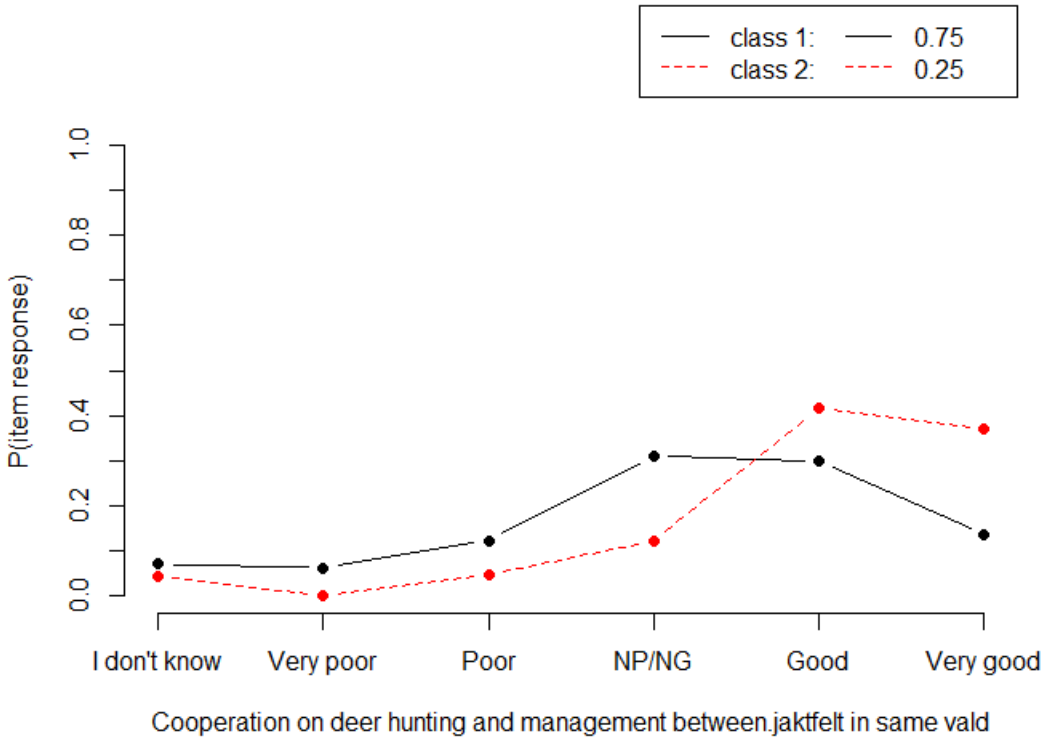
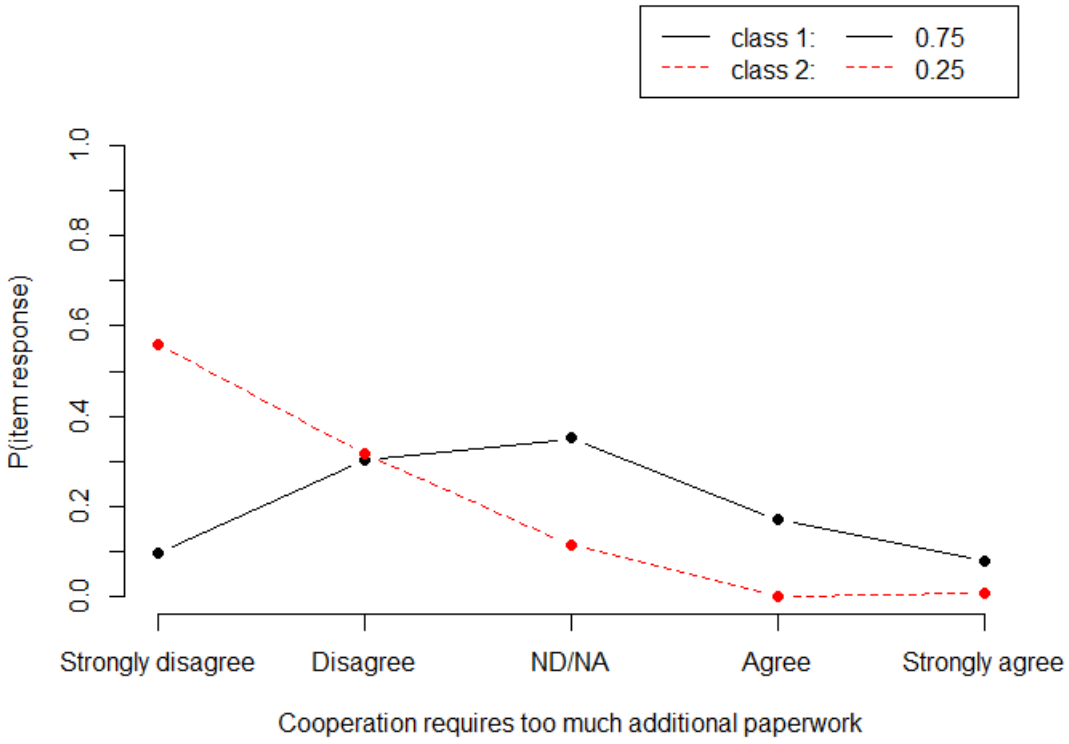
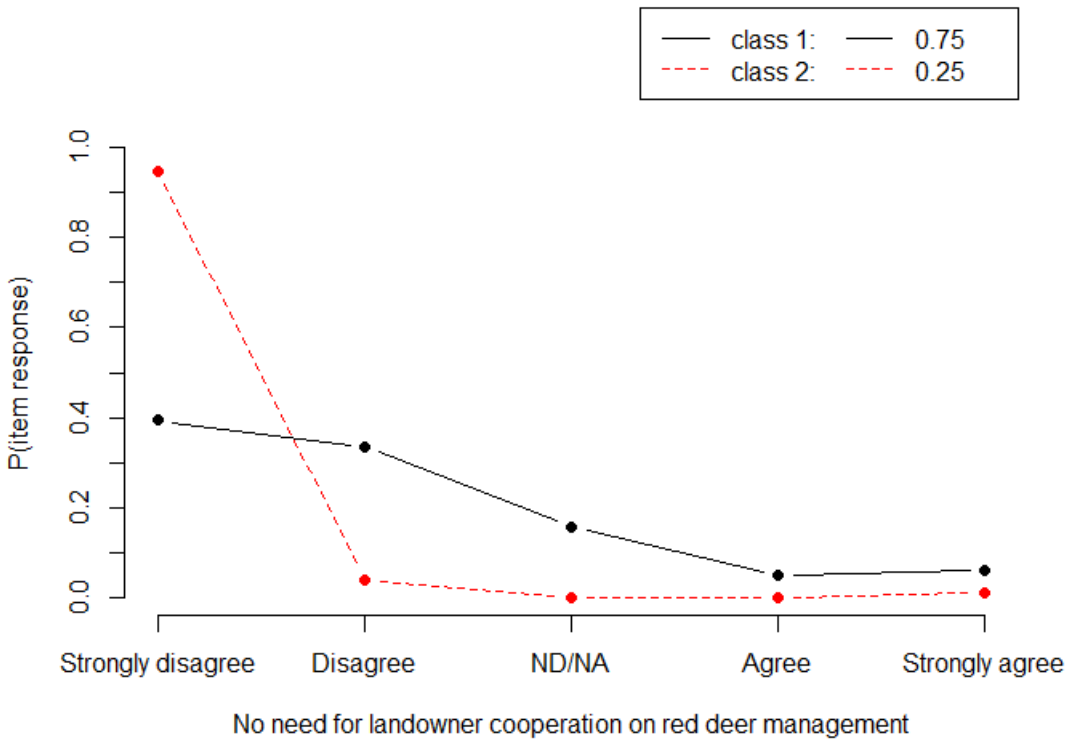
Appendix 4

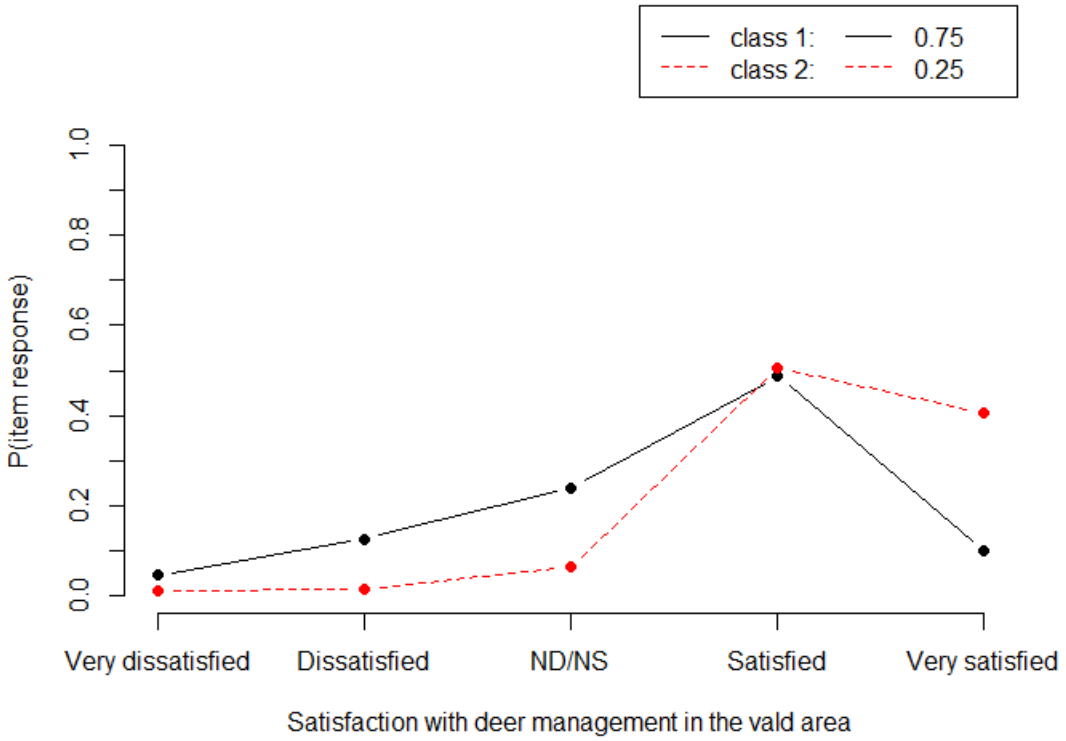
Latent Class Analysis (LCA) and Latent Class regression with size of vald. The conditional item response probabilities for the 2 latent classes for the 7 variables are plotted in Figure A4.1a-g and LCA fit is summarised in Table A4.1.

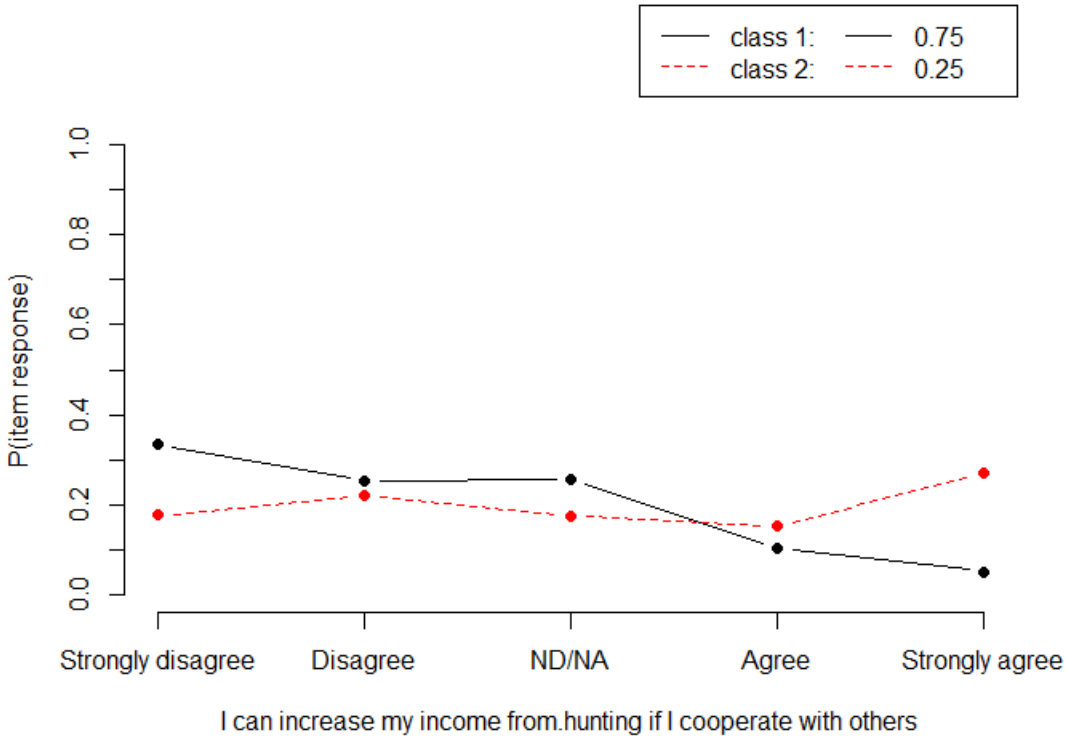
Figure A4.1a-g: Conditional item response probabilities, for each class, by (a) cooperation between jakfelt (hunting field) in same vald,(b) cooperation requiring too much paperwork, (c) need for landowners cooperation, (d) satisfaction with deer management in the vald area, (e) increased hunting income from cooperation, (f) differences in landowners' management goals, (g) population situation differing between hunting fields (Class 1 = 'opportunistic co-operators', class 2 = 'expert co-operators'. NP/NG = neither poor nor good; ND/NA = neither disagree nor agree; ND/NS = neither dissatisfied nor satisfied).

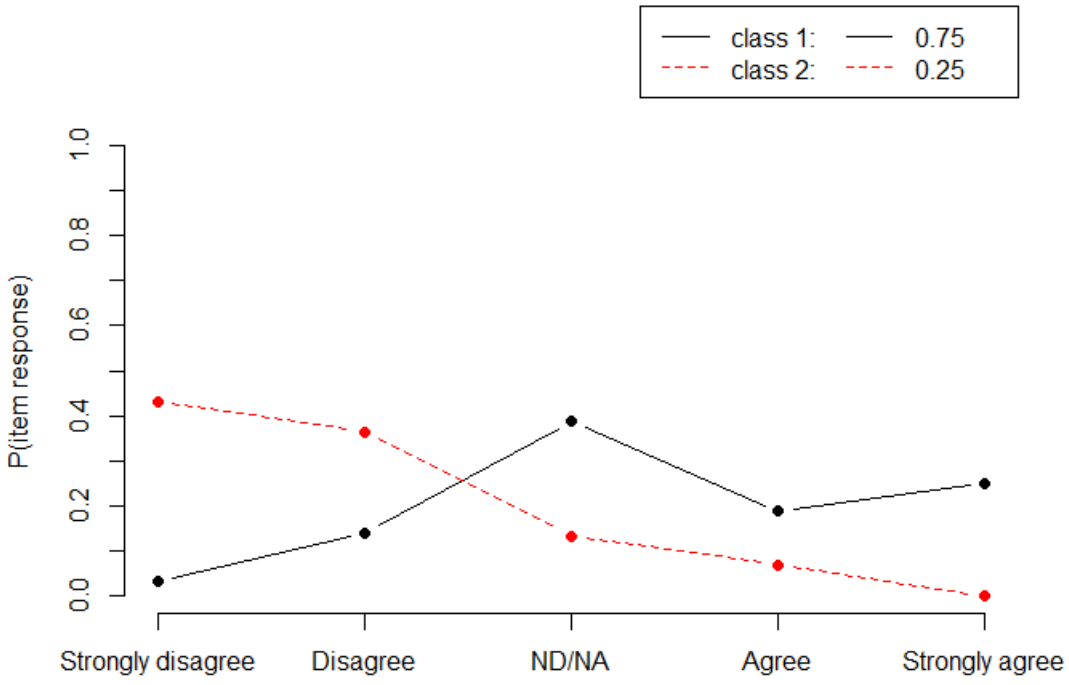



class 1: 0.75
class 2: 0.25
P(item response)
0.0
0.2
0.4
0.6
0.8
1.0
Strongly disagree
Disagree
ND/NA
Agree
Strongly agree
Cooperation requires too much additional paperwork

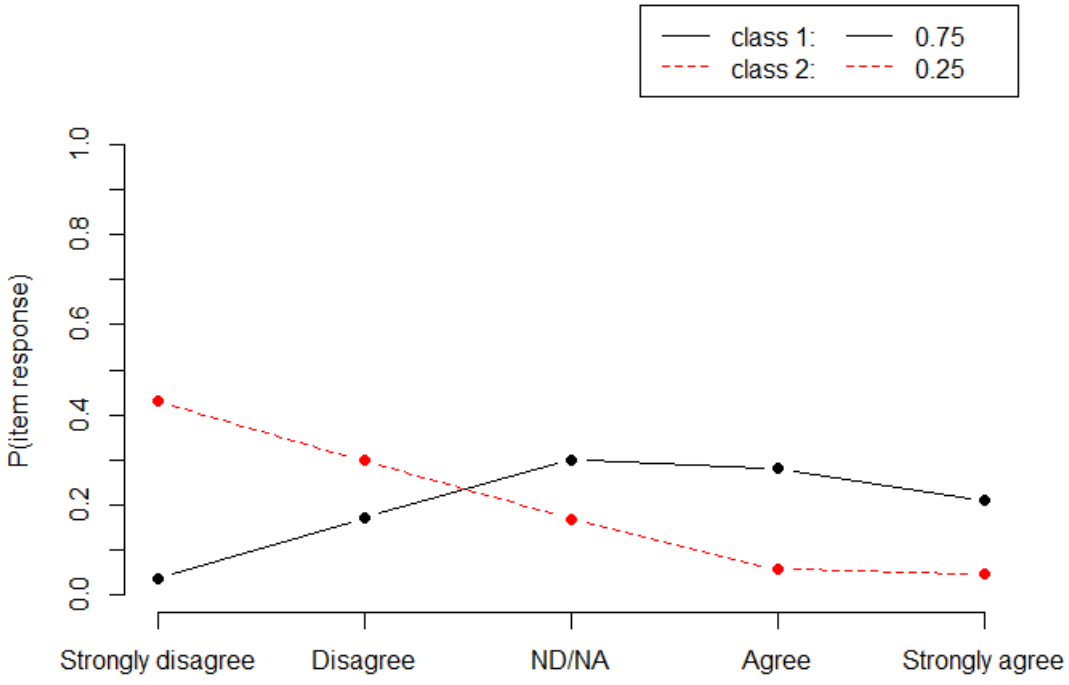

class 1: 0.75
class 2: 0.25
P(item response)
0.0
0.2
0.4
0.6
0.8
1.0
Strongly disagree
Disagree
ND/NA
Agree
Strongly agree
No need for landowner cooperation on red deer management


class 1: 0.75
class 2: 0.25
P(item response)
0.0
0.2
0.4
0.6
0.8
1.0
Very dissatisfied
Dissatisfied
ND/NS
Satisfied
Very satisfied
Satisfaction with deer management in the vald area


class 1: 0.75
class 2: 0.25
P(item response)
0.0
0.2
0.4
0.6
0.8
1.0
Strongly disagree
Disagree
ND/NA
Agree
Strongly agree
I can increase my income from.hunting if I cooperate with others



The goals of other landowners are very different from my own



Population situation differs too much between hunting fields

Table A4.1: LCA fit

AIC	8,099.305
BIC	8,335.243
X^2	125,034.300

Latent Class regression according to size of vald

Although the plot of the predicted prior probabilities of latent class membership at varying sizes of the valds (see Figure A4.2) seems to show that the higher the vald size, the more likely the respondent is to belong to class 2 (expert co-operators), we concluded from the results from the LC regression (Table A4.2) that the size of vald does not significantly predict class membership.

Figure A4.2: Probability of latent class membership by vald size.

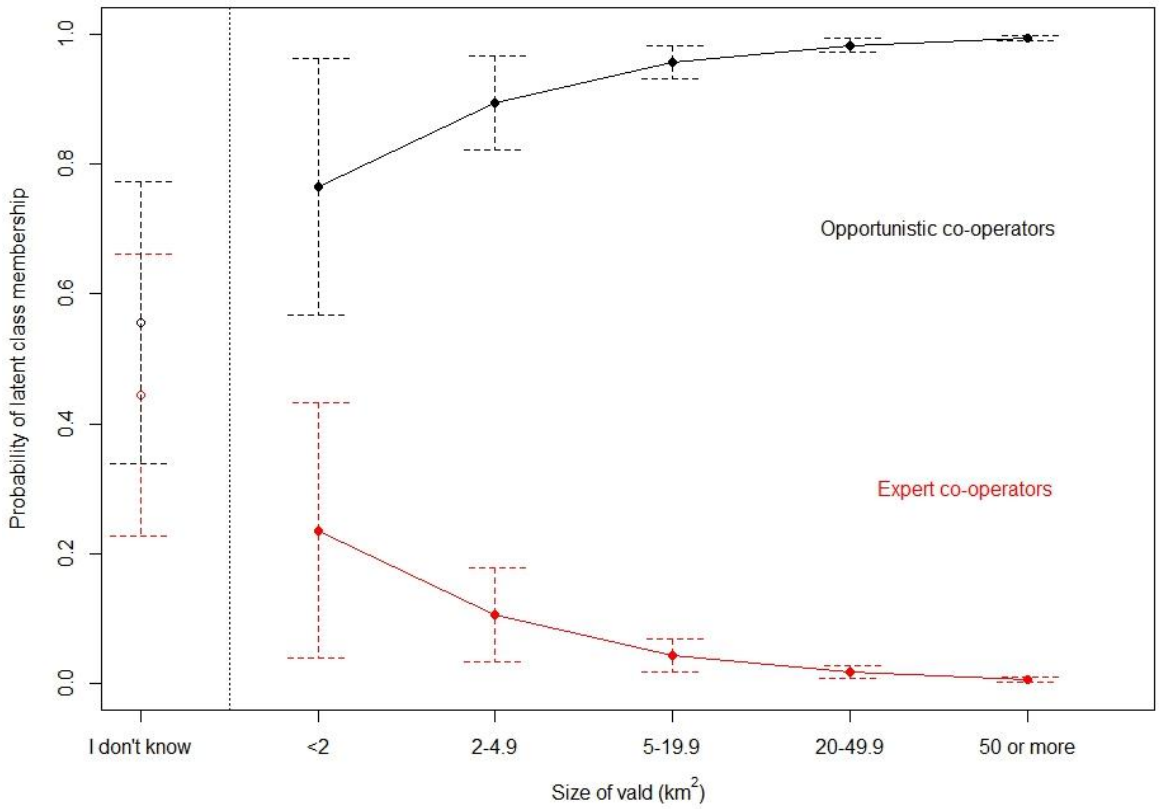


Table A4.2: LC regression for varying levels of size vald (n=402)

	Estimate	Std. error	t value	Pr(>|t|)
<2 km^2	-0.154	0.836	-0.185	0.854
2-4.9 km^2	0.132	0.677	0.194	0.846
5-19.9 km^2	0.306	0.570	0.537	0.592
20-49.9 km^2	0.569	0.569	1.001	0.318
50 km^{2}or more	0.955	0.547	1.744	0.082
AIC	8,084.507			
BIC	8,340.280			
X^2	125,538.300			