

NTNU /NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
Institutt for sosiologi og statsvitenskap /Department of sociology and political science
Eksamensoppgåver/ Eksamensoppgaver/ Examination question
SOS3003 “Anvendt Statistisk Dataanalyse i Samfunnsvitenskap” 2009/12/01

NTNU, Norges teknisk-naturvitenskapelige universitet

**EXAMINATION QUESTIONS FOR /
EKSAMENSOPPGÅVE I /
EKSAMENSOPPGAVE I
SVSOS3003
“ANVENDT STATISTISK DATAANALYSE I SAMFUNNSVITENSKAP”**

Contact during examinations/ kontakt under eksamen/ kontakt under eksamen:

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Place of examination/ eksamensstad/ eksamenssted: Dragvoll

Time allowed/ tid til eksamen/ tid til eksamen: 6 hours/ 6 timar/ 6 timer

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Tillatte hjelpemiddel under eksamen:

Kalkulator

Allison, Paul D. 2002. *Missing data*. No 136 Quantitative Applications in the Social Sciences. London: Sage.

Hamilton, Lawrence C. 1992. *Regression with graphics*. Belmont: Duxbury.

Hamilton, Lawrence C. 2008. A Low-Tech Guide to Causal Modelling.

<http://pubpages.unh.edu/~lch/causal2.pdf> , Handout, 12 pages.

Norwegian-English / English-Norwegian dictionary

Berge, Erling. 2009. *SOS3003 Applied data analysis for social science: Collected lectures 2009*. Handout, 271 pages. Similarly for earlier years

Både lærebøker og forelesningsnotat kan inneholde skriftlige notat.

Det er ikke lov å ta med eksamenoppgaver eller løsningsforslag fra tidligere år.

BOKMÅL

Alle eksamenoppgavene benytter data fra Malawi samla inn under feltarbeid i 2007. Data kommer fra lange intervju og spørreskjema samla inn fra 270 hushold pluss noen tilleggsinformanter. Data omfatter også tillitsspill data fra 267 par av spillere. I oppgavene her benytter vi data fra tillitsspillet. De finner mer om utvalget og variablene som er benyttet nedenfor.

OPPGAVE 1 (OLS-regresjon, vekt 0,5)

I dette spørsmålet utforsker vi tilbøyeligheten til å være sjenerøs mot mennesker fra ens eget lokalsamfunn når en ikke vet identiteten til personen en viser sjenerøsitet. En kunne konstatere at allmenn tillit (målt ved svaret "ja, folk flest er til å stole på" på spørsmålet "Generelt sett, mener du at folk flest er til å stole på eller at de ikke er til å stole på?") ikke korrelerer med sjenerøsitet. I stedet ville en se på tre andre typer forklaringsfaktorer: generelle personlige karakteristika, indikatorer på (relativ) rikdom, og indikatorer på kultur.

a) Gi en omtale av virkningen som "Mattress owned" har på "Generosity" slik dette er estimert i modell 4. Finn et 95% konfidensintervall for virkningen.

b) Avgjør om interaksjonen mellom "Sex of respondent" og variablene "Mattress owned" og "Radio owned" bidrar signifikant til forklaringen av variansen til den avhengige variabelen. Bruk et 0.05 nivå for signifikanstesten og formuler eksplisitt hypotesen som blir testet.

c) Presenter forutsetningene som må være tilfredsstillt dersom estimatene og testene i de 9 modellene skal være troverdige. Avgjør om de tabellene som er presentert kan gi grunnlag for tvil om at forutsetningene er tilfredsstillt.

d) Basert på tabellene som er presentert, hva kan sies om virkningen av de tre typene forklaringsfaktorer på nivået av sjenerøsitet? Drøft spesielt virkningen av "sex", "age" og relativ rikdom i modell 1-4.

OPPGAVE 2 (Indekskonstruksjon, vekt 0,1)

I den samme studien som er benyttet ovenfor ble det stilt åtte spørsmål om mistillit til folk, og 14 om mistillit til institusjoner. En kan gå ut fra at det er minst en underliggende (mis)tillitsdimensjon som kan forklare mønsteret i svarene. For å studere dette spørsmålet ble det utført en prinsippal komponentanalyse. I den analysen ble 16 av de 22 mistillitsspørsmålene benyttet.

a) Drøft tallet på underliggende dimensjoner og hvordan de skal tolkes så langt som vedlagte tabeller tillater.

OPPGAVE 3 (Logistisk regresjon, vekt 0,4)

Mellom spørsmålene om tillit var det et enkelt todelt spørsmål "Generelt sett, mener du at folk flest er til å stole på eller at de ikke er til å stole på?" De som svarte "ja, folk flest er til å stole på" ble kodet 1 på den avhengige variabelen "Trust", og de som ikke svarte slik ble kodet 0. Det manglet svar for en person.

For å studere korrelasjonen mellom "Trust" og de underliggende dimensjonene i mistillit som ble studert i forrige spørsmål vil vi gjennomføre en logistisk regresjon med "Trust" som avhengig variabel. Tre modeller er estimert. Resultatet er presentert i tabellene for spørsmål 3.

a) Avgjør om "Sex" bidrar signifikant til modellen av "Trust". Finn et 95% konfidensintervall for den direkte effekten av "Sex" i modell 3.

b) Skriv ned likningen som gir sannsynligheten for å svare "ja, folk flest er til å stole på" som funksjon av mistillit til moderne autoriteter (MistMA244) i et betinget effektplott som vil minimere predikerte sannsynligheter for kvinner. Skriv også ned likningen som vil maksimere predikerte sannsynligheter for menn.

c) For model 3 drøft mulige brudd på forutsetningene som er nødvendige for å få troverdige parameterestimat.

Tillatte hjelpemiddel under eksamen:

Kalkulator

Allison, Paul D. 2002. *Missing data*. No 136 Quantitative Applications in the Social Sciences. London: Sage.

Hamilton, Lawrence C. 1992. *Regression with graphics*. Belmont: Duxbury.

Hamilton, Lawrence C. 2008. A Low-Tech Guide to Causal Modelling.

<http://pubpages.unh.edu/~lch/causal2.pdf> , Handout, 12 pages.

Norwegian-English / English-Norwegian dictionary

Berge, Erling. 2009. *SOS3003 Applied data analysis for social science: Collected lectures 2009*. Handout, 271 pages. Similarly for earlier years

Både lærebøker og forelesingsnotat kan inneholde skriftlege notat.

Det er ikkje lov å ta med eksamensoppgåver eller løysingframlegg frå tidlegare år.

NYNORSK

Alle eksamensoppgåvene nyttar data frå Malawi samla under feltarbeid i 2007. Data kjem frå lange intervju og spørjeskjema samla inn frå 270 hushald pluss nokre tilleggsinformantar. Data omfattar også tillitsspel data frå 267 par av spelarar. . I oppgåvene her nyttar vi data frå tillitsspelet. De finn meir om utvalet og variablar som er nytta nedanfor.

OPPGÅVE 1 (OLS-regresjon, vekt 0,5)

I dette spørsmålet utforskar vi tildrivet til å vere sjenerøs mot menneskje frå eins eige lokalsamfunn når ein ikkje veit identiteten til personen ein viser sjenerøsitet. Ein kunne konstatere at allmenn tillit (målt ved svaret "ja, folk flest er til å stole på" på spørsmålet "Generelt sett, meiner du at folk flest er til å stole på eller at dei ikkje er til å stole på?") ikkje korrelerer med sjenerøsitet. I staden ville ein sjå på tre andre typar forklaringsfaktorar: generelle personlege karakteristika, indikatorar på (relativ) rikdom, og indikatorar på kultur.

a) Gi ein omtale av verknaden som "Mattress owned" har på "Generosity" slik dette er estimert i modell 4. Finn eit 95% konfidensintervall for verknaden.

b) Avgjer om interaksjonen mellom "Sex of respondent" og variablane "Mattress owned" og "Radio owned" yter signifikant til forklaringa av variansen til den avhengige variabelen. Bruk eit 0.05 nivå for signifikanstesten og formuler eksplisitt hypotesen som vert testa.

c) Presenter føresetnadene som må vere stetta dersom estimata og testane i dei 9 modellane skal vere truverdige. Avgjer om dei tabellane som er presentert kan gi grunnlag for tvil om at føresetnadene er stetta.

d) Basert på tabellane som er presentert kva kan seiast om verknaden av dei tre typane forklaringsfaktorar på nivået av sjenerøsitet? Drøft spesielt verknaden av "sex", "age" og relativ rikdom i modell 1-4.

OPPGÅVE 2 (Indekskonstruksjon, vekt 0,1)

I same studien som er nytta ovanfor vart det stilt åtte spørsmål om mistillit til folk, og 14 om mistillit til institusjonar. Ein kan gå ut frå at det er minst ein underliggjande tillitsdimensjon som kan forklare mønsteret i svara. For å studere dette spørsmålet vart det utført ein prinsipal komponentanalyse. I den analysen vart 16 av dei 22 mistillitsspørsmåla nytta.

a) Drøft talet på underliggjande dimensjonar og tydinga deira så langt som vedlagte tabellar gir høve.

OPPGÅVE 3 (Logistisk regresjon, vekt 0,4)

Mellom spørsmåla om tillit var det eit enkelt todelt spørsmål "Generelt sett, meiner du at folk flest er til å stole på eller at dei ikkje er til å stole på?" Dei som svara "ja, folk flest er til å stole på" vart koda 1 på den avhengige variabelen "Trust", og dei som ikkje svara slik vart koda 0. Det mangla svar for ein person.

For å granske korrelasjonen mellom "Trust" og dei underliggjande dimensjonane i mistillit som vart studert i førre spørsmålet vil vi gjennomføre ein logistisk regresjon med "Trust" som avhengig variabel. Tre modellar er estimert. Resultata er presentert i tabellane for spørsmål 3.

a) Avgjer om "Sex" yter signifikant til modellen av "Trust". Finn eit 95% konfidensintervall for den direkte effekten av "Sex" i modell 3.

b) Skriv ned likninga som gir sannsynet for å svare "ja, folk flest er til å stole på" som funksjon av mistillit til moderne autoritetar (MistMA244) i eit vilkårsfastlagt effektplott som vil minimere predikert sannsyn for kvinner. Skriv likeeins ned likninga som vil maksimerer predikerte sannsyn for menn.

c) For modell 3 drøft moglege brot på føresetnadene som er nødvendige for å få truverdige parameterestimater.

Permitted helpful materials in the examination:

Calculator

Allison, Paul D. 2002. *Missing data*. No 136 Quantitative Applications in the Social Sciences. London: Sage.

Hamilton, Lawrence C. 1992. *Regression with graphics*. Belmont: Duxbury.

Hamilton, Lawrence C. 2008. A Low-Tech Guide to Causal Modelling.

<http://pubpages.unh.edu/~lch/causal2.pdf> , Handout, 12 pages.

Norwegian-English / English-Norwegian dictionary

Berge, Erling. 2009. *SOS3003 Applied data analysis for social science: Collected lectures 2009*. Handout, 271 pages. Similarly for earlier years

Both textbooks and handouts may contain written notes.

It is not allowed to bring former examinations and grader’s advice.

ENGLISH

All questions use data from Malawi collected during field work in 2007. The data come from long interviews and questionnaire forms collected from 270 households plus some additional informers. The data also comprise trust game data from 267 pairs of players. In the present questions we use data from the trust game. More on the sample and variables is presented below.

QUESTION 1 (OLS-regression, weight 0,5)

In this question we explore the propensity to be generous to people within your own community when you do not know the identity of the person you show generosity. It was determined that trust (as measured by answering “yes, most people can be trusted” to the question “Generally speaking, do you think most people can be trusted or that they cannot be trusted?”) did not correlate with generosity. Instead three other types of explanatory factors were considered: general personal characteristics, indicators of wealth, and indicators of culture.

a) Describe the impact of “Mattress owned” on Generosity as it is estimated by model 4. Find a 95% confidence interval for the impact.

b) Determine if the interaction between “Sex of respondent” and the variables “Mattress owned” and “Radio owned” contribute significantly to the explanation of variance in the dependent variable. Use a 0.05 level of significance for the test and state explicitly the hypothesis that is being tested.

c) Present the assumptions that need to be satisfied if the estimates and tests of the 9 models are to be trustworthy. Determine if the tables presented give any reason to doubt that the model assumptions are satisfied

d) Based on the tables presented what can you say about the explanatory factors affecting level of generosity? Discuss in particular the impact of sex, age, and wealth in models 1-4.

QUESTION 2 (Index construction, weight 0,1)

In the same study as used above eight questions were asked about mistrust of people, and 14 about mistrust of institutions. It was assumed that there was at least one underlying trust-dimension responsible for the pattern of responses. To explore this question a principal component analysis was performed. In the analysis 16 of the 22 questions about mistrust were used.

a) Discuss the number of underlying dimensions and their meaning as far as attached tables allow.

QUESTION 3 (Logistic regression, weight 0,4)

Among the questions about trust there was one simple binary question: “Generally speaking, do you think most people can be trusted or that they cannot be trusted?” Those who answered “yes, most people can be trusted” were coded 1 on our dependent variable “Trust”, and those who did not were coded 0. There was one missing. To investigate the correlation between “Trust” and the underlying dimensions of trust investigated in the previous question we will run a logistic regression with Trust as dependent variable. Three models were estimated. The results are presented in the tables for question 3.

a) Determine if sex contributes significantly to the model of Trust. Find a 95% confidence interval for the direct effect of sex in model 3.

b) Write up the equation that will produce the probability for saying “yes, most people can be trusted” as function of mistrust to modern authorities (MistMA244) in a conditional effect plot that will minimize predicted probabilities for women, also likewise write up the equation that will maximize predicted probabilities for men.

c) For model 3 discuss possible deviation from the assumptions necessary for obtaining trustworthy parameter estimates.

VARIABLES AND SAMPLE

The Sample

As part of the fieldwork in Malawi during the summer 2007 it was planned to conduct 270 plays of a simple trust game, each game consisting of two players. 267 games, involving 534 persons, were actually performed. Of these 534 we should ideally have had long interviews with 267, but we have been able to identify only 246. These consisted of 124 investors (player 1 in a pair) and 122 trustees (player 2 in a pair). Plays are performed village by village where 30 persons are divided into two groups one group with 15 player 1 the other group with 15 player 2.

One play of the game consists of giving both investor (player 1) and trustee (player 2) 80MKW (about a day wage for unskilled labour). The player 1 shall then decide for her-/himself how much to send to player 2. It may be 0, 20, 40, 60 or 80 MKW. In the process the amount is increased to 3 times the investment. Player 2 is then charged with the task of determining how to share the fund by sending back to player 1 from 0 and up to $3 * \text{Investment} + 80 \text{ MKW}$ (all that player 2 has available). It is taken great care to hide who the two players in a pair are. Each only knows that it is one of a group 15 players playing the opposite part. In the tables below we shall take a look at all player 2 that we have interview data for. We shall see if there is any pattern to their generosity. By generosity we shall mean their propensity to send back more or less than what we think is a fair division of the outcome. Since both start out with the same amount and since player 1 sends to player 2 an amount we call *Invested*, player 2 receives according to the rules $3 * \text{Invested}$. It seems fair that she/ he should send back the invested amount and that the two of them should share the capital gains ($=2 * \text{Invested}$). We observed an actual amount returned. We call this *Returned*. Hence we can compute our variable *Generosity*:

$$\text{Generosity} = \text{Returned} - 2 * \text{Invested}$$

One feature of Malawian society needs to be considered: about half of the population, mainly in the south, lives in a matrilineal culture. This gives the women certain powers in relationship to questions of land tenure and children. In these matters the matrilineal culture is the mirror of the patrilineal culture that also is found, but mainly in the north.

The variables 'Mattress owned' and 'Radio owned' should be seen as indicators of wealth.

Variables

Dependent variable question 1: Generosity. Returned more or less than 50% of capital gains [*Returned – 2* Invested*]

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -120	2	1,6	1,6	1,6
-100	4	3,3	3,3	4,9
-80	3	2,5	2,5	7,4
-60	13	10,7	10,7	18,0
-40	23	18,9	18,9	36,9
-20	27	22,1	22,1	59,0
0	35	28,7	28,7	87,7
20	10	8,2	8,2	95,9
40	3	2,5	2,5	98,4
60	2	1,6	1,6	100,0
Total	122	100,0	100,0	

Explanatory variables question 1:

1. Region

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid North	39	32,0	32,0	32,0
Central	41	33,6	33,6	65,6
South	42	34,4	34,4	100,0
Total	122	100,0	100,0	

2. Lineage: Type of marriage and kinship system

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Matrilineal and neolocal	1	,8	,8	,8
Matrilineal and matrilocal (chikamwini)	45	36,9	37,2	38,0
Matrilineal and patrilocal (Chitengwa)	24	19,7	19,8	57,9
Patrilineal and neolocal	1	,8	,8	58,7
Patrilineal and patrilocal	39	32,0	32,2	90,9
Do not know	11	9,0	9,1	100,0
Total	121	99,2	100,0	
Missing System	1	,8		
Total	122	100,0		

3. Mattress owned. Personal owner of mattress.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	99	81,1	81,1	81,1
	1=yes	23	18,9	18,9	100,0
	Total	122	100,0	100,0	

4. Radio owned. Personal ownership of radio.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	43	35,2	35,2	35,2
	1=yes	79	64,8	64,8	100,0
	Total	122	100,0	100,0	

5. Sex of respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	59	48,4	48,8	48,8
	Male=1	62	50,8	51,2	100,0
	Total	121	99,2	100,0	
Missing	"Missing"	1	,8		
	Total	122	100,0		

6. Age of respondent in years

	N	Minimum	Maximum	Mean	Std. Deviation
Age of respondent	118	15	85	41,53	17,430
Valid N (listwise)	118				
Missing	4				
Total	122				

Dependent variable question 3

M1. Trust in people in general		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Most people can be trusted - Code =1	56	45.9	46.3	46.3
	Most people cannot be trusted – Code = 0	65	53.3	53.7	100.0
	Total	121	99.2	100.0	
Missing	System	1	.8		
	Total	122	100.0		

Variables indicating mistrust used in question 2 and 3

M2. In general, do you trust the leaders and officials in this country? Would you say you trust all, most, some, just a few or none in the following groups		All	Most	Some	Only a few	None	Do not know / Missing
Variables: high value equals mistrust		Code=1	Code=2	Code=3	Code=4	Code=5	
M2.a	Government officials	33	17	29	30	8	5
M2.b	Councillors	11	8	24	27	31	21
M2.c	Local assembly staff	19	9	28	23	16	27
M2.d	Traditional authorities	44	24	29	21	3	1
M2.e	Group village headmen	40	27	25	27	2	1
M2.f	Village headmen	41	28	22	26	3	2
M2.g	Courts	39	11	35	24	4	9
M2.h	Army	48	21	24	6	1	22
M2.i	Leaders of NGOs	35	21	37	13	4	12
M2.j	Police	41	20	29	20	6	6
M2.k	Traders	17	4	29	39	32	1
M2.l	Teachers	44	26	35	14	2	1
M2.m	School administrators	39	31	27	17	3	5
M2.n	Religious leaders	45	36	28	11	120	2
N=122							

M3. In general, do you trust people in this area? Would you say you trust all, most, some or just a few people in the following groups?		All	Most	Some	Only a few	None	Do not know / Missing
Variables: high value equals mistrust		Code=1	Code=2	Code=3	Code=4	Code=5	
M3.a	Your family members	79	21	18	4	0	0
M3.b	Your relatives	49	22	36	12	3	0
M3.c	Your village	22	23	46	29	2	0
M3.d	People from outside the village	8	16	38	41	18	1
M3.e	People of same ethnic group	16	22	46	30	7	1
M3.f	People from outside ethnic group	7	11	41	45	13	5
M3.g	People from same church/mosque	33	28	41	19	1	0
M3.h	People <i>not</i> from same church/mosque	17	14	41	37	12	1
N=122							

TABLES QUESTION 1

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Age of respondent, Sex of respondent ^a		. Enter
2	Age squared ^a		. Enter
3	Sex * Age squared, Sex * Age ^a		. Enter
4	Mattress owned, Radio owned ^a		. Enter
5	Sex * Own mattress, Sex * Own radio ^a		. Enter
6	North region, South region ^a		. Enter
7	Sex*South, Sex*North ^a		. Enter
8	Other marriage patterns ^c , Patrilineal and patrilocal, Matrilineal and matrilocal ^a		. Enter
9	Sex * Other marriage patterns, Sex * Matrilineal and Matrilocal, Sex * Patrilineal and Patrilocal ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: Returned more or less than 50% of capital gains

c. Other marriage patterns consist of those answering "Matrilineal and neolocal", "Patrilineal and neolocal", and "Don't know"

Model Summary^j

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.179 ^a	.032	.015	34.161	.032	1.868	2	113	.159	
2	.192 ^b	.037	.011	34.227	.005	.566	1	112	.454	
3	.312 ^c	.097	.056	33.439	.060	3.673	2	110	.029	
4	.392 ^d	.154	.099	32.673	.057	3.608	2	108	.030	
5	.394 ^e	.155	.084	32.949	.002	.098	2	106	.907	
6	.473 ^f	.223	.141	31.896	.068	4.558	2	104	.013	
7	.496 ^g	.246	.150	31.736	.023	1.527	2	102	.222	
8	.534 ^h	.285	.169	31.367	.039	1.804	3	99	.151	
9	.584 ⁱ	.341	.211	30.572	.056	2.740	3	96	.048	1.920

a. Predictors: (Constant), Age of respondent, Sex of respondent

b. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared

c. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age

d. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned

e. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio

f. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio, North region, South region

g. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio, North region, South region, Sex*South, Sex*North

h. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio, North region, South region, Sex*South, Sex*North, Other marriage patterns, Patrilineal and patrilocal, Matrilineal and matrilocal

Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01

i. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio, North region, South region, Sex*South, Sex*North, Other marriage patterns, Patrilineal and patrilocal, Matrilineal and matrilocal, Sex * Other marriage patterns, Sex * Matrilineal and Matrilocal, Sex * Patrilineal and Patrilocal

j. Dependent Variable: Returned more or less than 50% of capital gains

ANOVA^j

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4359.591	2	2179.795	1.868	.159 ^a
	Residual	131871.444	113	1167.004		
	Total	136231.034	115			
2	Regression	5022.328	3	1674.109	1.429	.238 ^b
	Residual	131208.707	112	1171.506		
	Total	136231.034	115			
3	Regression	13235.404	5	2647.081	2.367	.044 ^c
	Residual	122995.630	110	1118.142		
	Total	136231.034	115			
4	Regression	20938.518	7	2991.217	2.802	.010 ^d
	Residual	115292.517	108	1067.523		
	Total	136231.034	115			
5	Regression	21150.404	9	2350.045	2.165	.030 ^e
	Residual	115080.630	106	1085.666		
	Total	136231.034	115			
6	Regression	30424.165	11	2765.833	2.719	.004 ^f
	Residual	105806.869	104	1017.374		
	Total	136231.034	115			
7	Regression	33499.330	13	2576.872	2.559	.004 ^g
	Residual	102731.705	102	1007.174		
	Total	136231.034	115			
8	Regression	38824.691	16	2426.543	2.466	.003 ^h
	Residual	97406.343	99	983.902		
	Total	136231.034	115			
9	Regression	46507.357	19	2447.756	2.619	.001 ⁱ
	Residual	89723.677	96	934.622		
	Total	136231.034	115			

a. Predictors: (Constant), Age of respondent, Sex of respondent

b. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared

c. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age

d. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned

e. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio

f. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio, North region, South region

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g. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio, North region, South region, Sex*South, Sex*North

h. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio, North region, South region, Sex*South, Sex*North, Other marriage patterns, Patrilineal and patrilocal, Matrilineal and matrilocal

i. Predictors: (Constant), Age of respondent, Sex of respondent, Age squared, Sex * Age squared, Sex * Age, Mattress owned, Radio owned, Sex * Own mattress, Sex * Own radio, North region, South region, Sex*South, Sex*North, Other marriage patterns, Patrilineal and patrilocal, Matrilineal and matrilocal, Sex * Other marriage patterns, Sex * Matrilineal and Matrilocal, Sex * Patrilineal and Patrilocal

j. Dependent Variable: Returned more or less than 50% of capital gains

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-17.432	8.513		-2.048	.043		
Sex of respondent	-12.328	6.384	-.180	-1.931	.056	.988	1.013
Age of respondent	.055	.184	.028	.300	.765	.988	1.013
2 (Constant)	-.841	23.650		-.036	.972		
Sex of respondent	-11.923	6.419	-.174	-1.857	.066	.981	1.020
Age of respondent	-.788	1.136	-.400	-.694	.489	.026	38.636
Age squared	.009	.012	.433	.752	.454	.026	38.515
3 (Constant)	43.248	29.905		1.446	.151		
Sex of respondent	-126.694	47.557	-1.848	-2.664	.009	.017	58.641
Age of respondent	-2.722	1.465	-1.382	-1.858	.066	.015	67.360
Age squared	.026	.016	1.271	1.683	.095	.014	69.473
Sex * Age	4.979	2.257	3.611	2.206	.029	.003	326.372
Sex * Age squared	-.046	.024	-2.128	-1.925	.057	.007	148.803
4 (Constant)	32.819	29.539		1.111	.269		
Sex of respondent	-119.871	46.696	-1.749	-2.567	.012	.017	59.219
Age of respondent	-2.065	1.483	-1.048	-1.393	.167	.014	72.309
Age squared	.020	.016	.976	1.277	.204	.013	74.545
Sex * Age	5.089	2.213	3.691	2.299	.023	.003	328.752
Sex * Age squared	-.050	.023	-2.322	-2.136	.035	.007	150.811
Mattress owned	19.268	8.398	.220	2.294	.024	.849	1.178
Radio owned	-14.420	7.194	-.201	-2.004	.048	.778	1.285

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Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
5 (Constant)	31.475	30.019		1.049	.297		
Sex of respondent	-117.719	47.343	-1.717	-2.486	.014	.017	59.854
Age of respondent	-1.994	1.533	-1.012	-1.300	.196	.013	75.964
Age squared	.020	.016	.946	1.197	.234	.013	78.327
Sex * Age	4.879	2.333	3.539	2.092	.039	.003	359.166
Sex * Age squared	-.047	.025	-2.206	-1.907	.059	.006	167.850
Mattress owned	22.310	11.337	.255	1.968	.052	.474	2.111
Radio owned	-16.126	9.540	-.225	-1.690	.094	.450	2.222
Sex * Own mattress	-6.975	17.062	-.057	-.409	.684	.408	2.450
Sex * Own radio	4.130	14.694	.058	.281	.779	.188	5.328
6 (Constant)	-14.062	32.757		-.429	.669		
Sex of respondent	-85.353	47.862	-1.245	-1.783	.077	.015	65.278
Age of respondent	-.729	1.552	-.370	-.470	.640	.012	83.070
Age squared	.008	.016	.370	.467	.642	.012	84.010
Sex * Age	3.989	2.305	2.893	1.730	.087	.003	374.298
Sex * Age squared	-.039	.024	-1.826	-1.606	.111	.006	173.009
Mattress owned	29.779	11.633	.341	2.560	.012	.422	2.371
Radio owned	-15.088	9.244	-.210	-1.632	.106	.449	2.226
Sex * Own mattress	-13.753	16.737	-.113	-.822	.413	.397	2.516
Sex * Own radio	2.527	14.238	.035	.177	.859	.187	5.339
North region	5.450	7.780	.075	.700	.485	.658	1.520
South region	25.304	8.648	.353	2.926	.004	.513	1.949
7 (Constant)	-36.881	35.123		-1.050	.296		
Sex of respondent	-54.402	50.903	-.794	-1.069	.288	.013	74.585
Age of respondent	-.224	1.586	-.114	-.141	.888	.011	87.607
Age squared	.003	.017	.137	.171	.865	.011	87.631
Sex * Age	3.252	2.336	2.358	1.392	.167	.003	388.156
Sex * Age squared	-.032	.025	-1.489	-1.297	.198	.006	178.501
Mattress owned	31.064	12.204	.355	2.545	.012	.379	2.636
Radio owned	-14.372	9.211	-.200	-1.560	.122	.448	2.233
Sex * Own mattress	-15.553	17.418	-.127	-.893	.374	.363	2.753
Sex * Own radio	2.202	14.190	.031	.155	.877	.187	5.356
North region	14.964	13.758	.205	1.088	.279	.208	4.802
South region	40.376	12.563	.563	3.214	.002	.241	4.154
Sex*North	-12.669	16.662	-.142	-.760	.449	.211	4.741
Sex*South	-31.290	17.941	-.231	-1.744	.084	.420	2.380

Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01

Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
8 (Constant)	-50.005	36.159		-1.383	.170		
Sex of respondent	-39.095	50.813	-.570	-.769	.443	.013	76.078
Age of respondent	.210	1.579	.106	.133	.895	.011	88.927
Age squared	-.002	.017	-.096	-.120	.905	.011	89.076
Sex * Age	2.356	2.363	1.708	.997	.321	.002	406.435
Sex * Age squared	-.022	.025	-1.022	-.880	.381	.005	186.935
Mattress owned	29.629	12.107	.339	2.447	.016	.377	2.656
Radio owned	-16.831	9.212	-.235	-1.827	.071	.437	2.287
Sex * Own mattress	-11.813	17.398	-.097	-.679	.499	.356	2.811
Sex * Own radio	6.307	14.148	.088	.446	.657	.183	5.451
North region	7.608	15.097	.104	.504	.615	.169	5.919
South region	33.060	14.933	.461	2.214	.029	.166	6.008
Sex*North	-19.981	17.353	-.224	-1.151	.252	.190	5.264
Sex*South	-29.823	18.042	-.221	-1.653	.102	.406	2.464
Matrilineal and matrilocal	14.374	12.968	.204	1.108	.270	.214	4.668
Patrilineal and patrilocal	20.750	11.662	.284	1.779	.078	.283	3.532
Other marriage patterns ^c	-1.670	12.697	-.015	-.132	.896	.529	1.891

Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
9 (Constant)	-16.644	38.993		-.427	.670		
Sex of respondent	-98.703	54.634	-1.440	-1.807	.074	.011	92.589
Age of respondent	.235	1.552	.119	.151	.880	.011	90.380
Age squared	-.002	.016	-.102	-.129	.897	.011	90.816
Sex * Age	3.228	2.323	2.341	1.389	.168	.002	413.649
Sex * Age squared	-.031	.024	-1.435	-1.257	.212	.005	189.957
Mattress owned	32.334	11.899	.370	2.717	.008	.370	2.701
Radio owned	-19.555	9.052	-.273	-2.160	.033	.430	2.324
Sex * Own mattress	-18.049	17.108	-.148	-1.055	.294	.349	2.862
Sex * Own radio	11.112	13.893	.156	.800	.426	.181	5.533
North region	3.847	16.893	.053	.228	.820	.128	7.802
South region	27.801	17.082	.388	1.627	.107	.121	8.276
Sex*North	-13.721	21.147	-.154	-.649	.518	.122	8.229
Sex*South	-23.525	23.497	-.174	-1.001	.319	.227	4.400
Matrilineal and matrilocal	-14.310	21.658	-.203	-.661	.510	.073	13.707
Patrilineal and patrilocal	-6.344	22.706	-.087	-.279	.781	.071	14.095
Other marriage patterns ^c	-46.917	21.813	-.432	-2.151	.034	.170	5.876
Sex * Matrilineal and matrilocal	35.404	26.953	.276	1.314	.192	.155	6.453
Sex * Patrilineal and patrilocal	29.770	26.353	.357	1.130	.261	.069	14.573
Sex * Other marriage patterns	75.449	27.447	.447	2.749	.007	.259	3.856

a. Dependent Variable: Returned more or less than 50% of capital gains

c. Other marriage patterns consist of "Matrilineal and neolocal", "Patrilineal and neolocal", and "Don't know"

Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-76.72	32.23	-21.21	20.110	116
Std. Predicted Value	-2.761	2.657	.000	1.000	116
Standard Error of Predicted Value	7.262	23.246	12.164	3.645	116
Adjusted Predicted Value	-77.18	42.00	-21.31	21.804	116
Residual	-73.573	63.525	.000	27.932	116
Std. Residual	-2.407	2.078	.000	.914	116
Stud. Residual	-2.644	2.201	.001	.997	116
Deleted Residual	-88.818	77.181	.098	33.598	116
Stud. Deleted Residual	-2.732	2.247	.000	1.006	116
Mahal. Distance	5.497	65.500	18.836	12.450	116
Cook's Distance	.000	.113	.011	.018	116
Centered Leverage Value	.048	.570	.164	.108	116

a. Dependent Variable: Returned more or less than 50% of capital gains

Descriptive Statistics of residuals and influence indicators

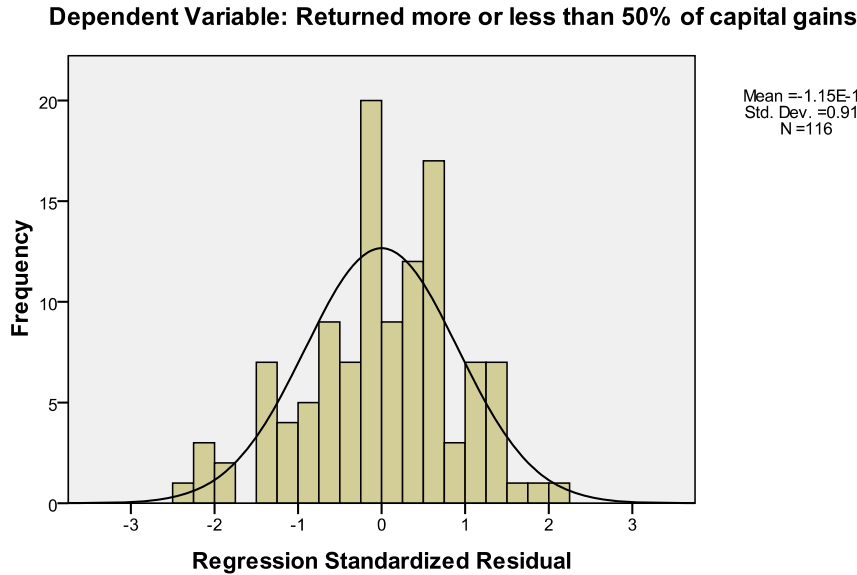
	N	Minimum	Maximum	Mean	Std. Deviation
Unstandardized Predicted Value	116	-76.72197	32.22839	-21.2068966	20.10999262
Unstandardized Residual	116	-73.57271	63.52517	.0000000	27.93216583
Standardized Predicted Value	116	-2.76057	2.65715	.0000000	1.0000000
Standardized Residual	116	-2.40657	2.07792	.0000000	.91366439
Cook's Distance	116	.00000	.11342	.0106245	.01799788
Centered Leverage Value	116	.04780	.56956	.1637931	.10826515
DFBETA Intercept	116	-12.57179	38.77358	.0931982	4.69560610
DFBETA Sex	116	-38.77358	22.22866	.0437329	6.46737171
DFBETA Age	116	-.67353	.49382	-.0048705	.14151342
DFBETA Age2	116	-.00503	.00644	.0000458	.00150086
DFBETA SexAge	116	-1.18914	.67353	-.0022551	.24141951
DFBETA SexAge2	116	-.00644	.01383	.0000347	.00254955
DFBETA OwnMattr	116	-4.97844	6.54121	-.0152227	1.24823836
DFBETA OwnRadio	116	-2.70170	2.49275	.0231179	.82209241
DFBETA SexOwnMatt	116	-11.33371	4.97844	.0265547	1.88524185
DFBETA SexOwnRadio	116	-3.84158	4.09783	-.0298116	1.21739718
DFBETA North	116	-11.09495	7.61351	-.0194002	1.92083345
DFBETA South	116	-7.86504	5.96645	-.0326039	1.36628277
DFBETA SexNorth	116	-7.61351	11.09495	.0391118	2.17449307
DFBETA SexSouth	116	-5.96645	7.86504	.0136134	1.87593093
DFBETA MatriMatri	116	-19.26481	18.59921	.0288225	2.68060797
DFBETA PatriPatri	116	-18.99135	13.31205	.0304718	2.64661224
DFBETA OtherMarri	116	-20.69637	10.90584	.0262673	2.87107350
DFBETA SexMatriM	116	-18.59921	19.26481	-.0218220	2.97130947
DFBETA SexPatriP	116	-13.31205	18.99135	-.0428752	2.85598331
DFBETA SexOtherMa	116	-15.65472	20.69637	-.0067112	3.43984550

Descriptive Statistics of residuals and influence indicators

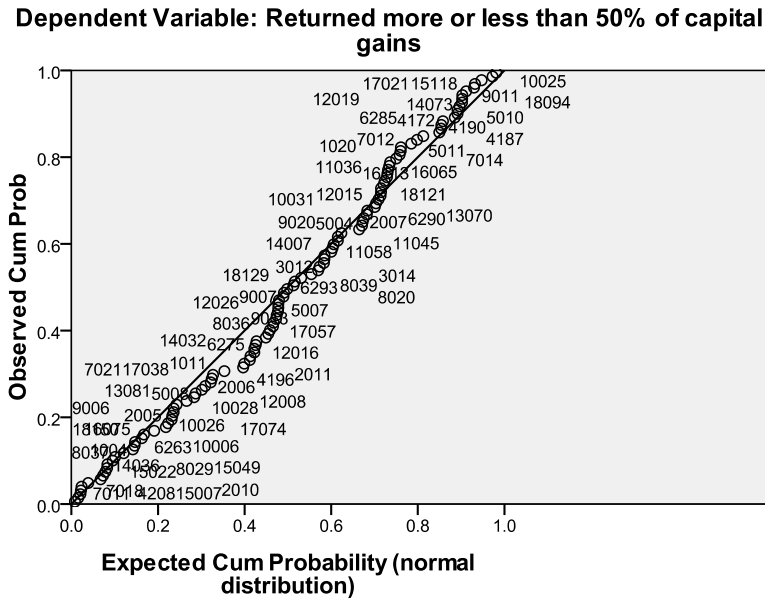
	N	Minimum	Maximum	Mean	Std. Deviation
Unstandardized Predicted Value	116	-76.72197	32.22839	-21.2068966	20.10999262
Unstandardized Residual	116	-73.57271	63.52517	.0000000	27.93216583
Standardized Predicted Value	116	-2.76057	2.65715	.0000000	1.00000000
Standardized Residual	116	-2.40657	2.07792	.0000000	.91366439
Cook's Distance	116	.00000	.11342	.0106245	.01799788
Centered Leverage Value	116	.04780	.56956	.1637931	.10826515
DFBETA Intercept	116	-12.57179	38.77358	.0931982	4.69560610
DFBETA Sex	116	-38.77358	22.22866	.0437329	6.46737171
DFBETA Age	116	-.67353	.49382	-.0048705	.14151342
DFBETA Age2	116	-.00503	.00644	.0000458	.00150086
DFBETA SexAge	116	-1.18914	.67353	-.0022551	.24141951
DFBETA SexAge2	116	-.00644	.01383	.0000347	.00254955
DFBETA OwnMattr	116	-4.97844	6.54121	-.0152227	1.24823836
DFBETA OwnRadio	116	-2.70170	2.49275	.0231179	.82209241
DFBETA SexOwnMatt	116	-11.33371	4.97844	.0265547	1.88524185
DFBETA SexOwnRadio	116	-3.84158	4.09783	-.0298116	1.21739718
DFBETA North	116	-11.09495	7.61351	-.0194002	1.92083345
DFBETA South	116	-7.86504	5.96645	-.0326039	1.36628277
DFBETA SexNorth	116	-7.61351	11.09495	.0391118	2.17449307
DFBETA SexSouth	116	-5.96645	7.86504	.0136134	1.87593093
DFBETA MatriMatri	116	-19.26481	18.59921	.0288225	2.68060797
DFBETA PatriPatri	116	-18.99135	13.31205	.0304718	2.64661224
DFBETA OtherMarri	116	-20.69637	10.90584	.0262673	2.87107350
DFBETA SexMatriM	116	-18.59921	19.26481	-.0218220	2.97130947
DFBETA SexPatriP	116	-13.31205	18.99135	-.0428752	2.85598331
DFBETA SexOtherMa	116	-15.65472	20.69637	-.0067112	3.43984550
Valid N (listwise)	116				

The following figures are based on Model 9:

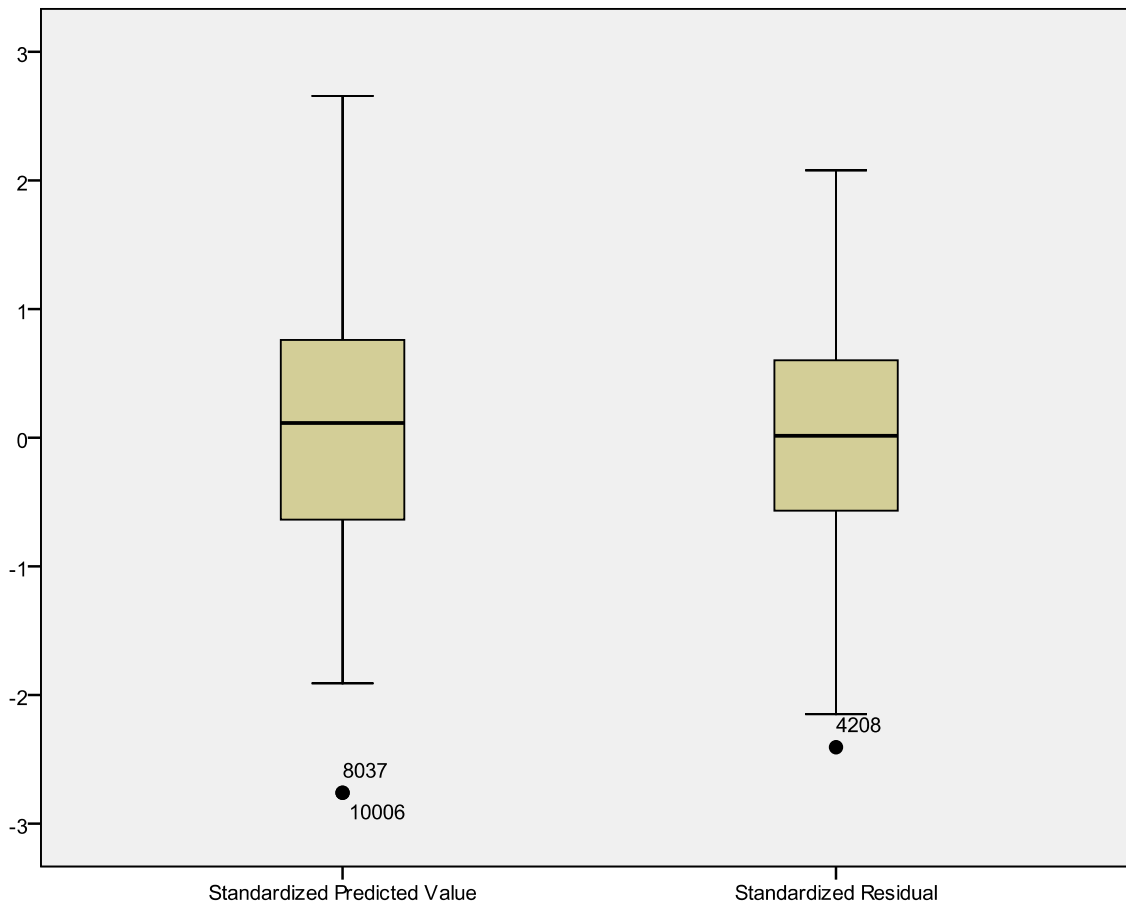
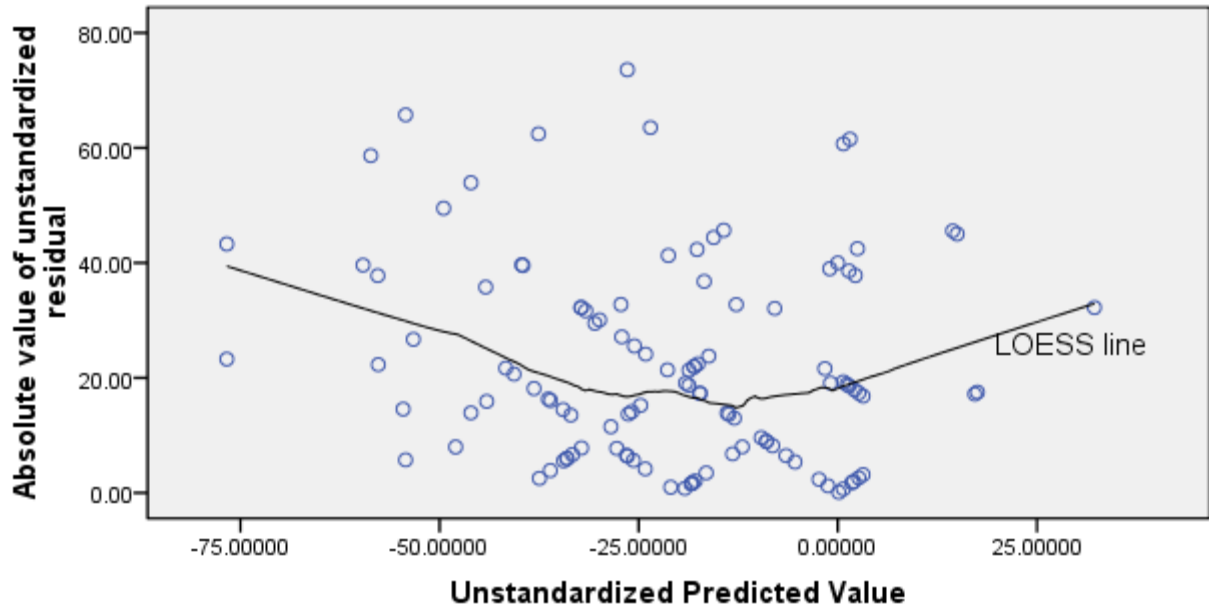
Histogram

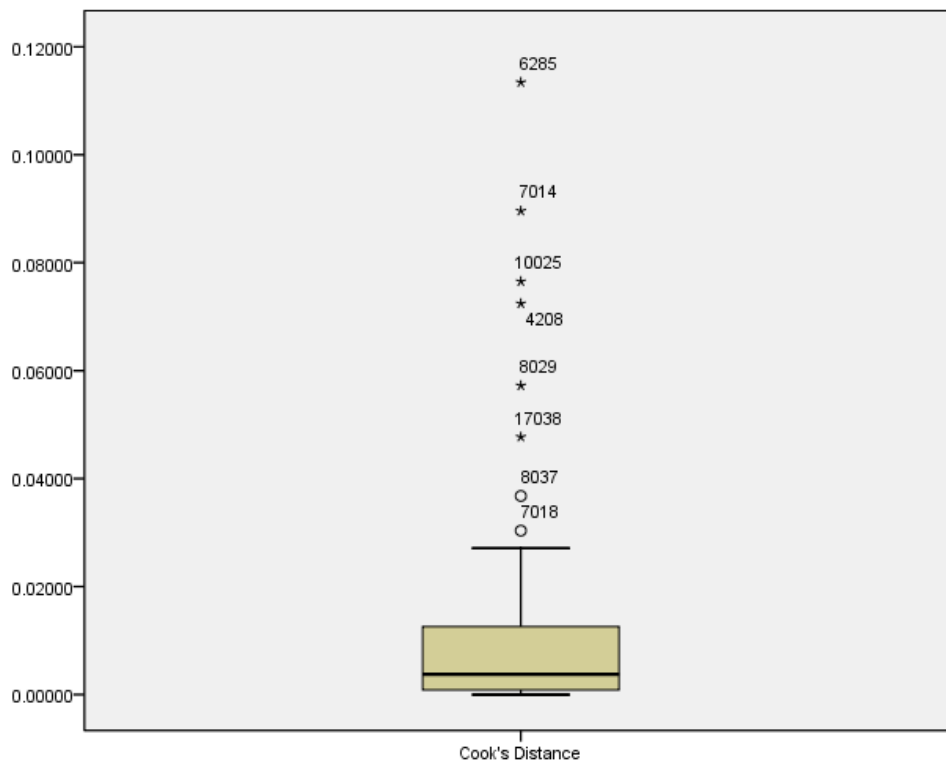
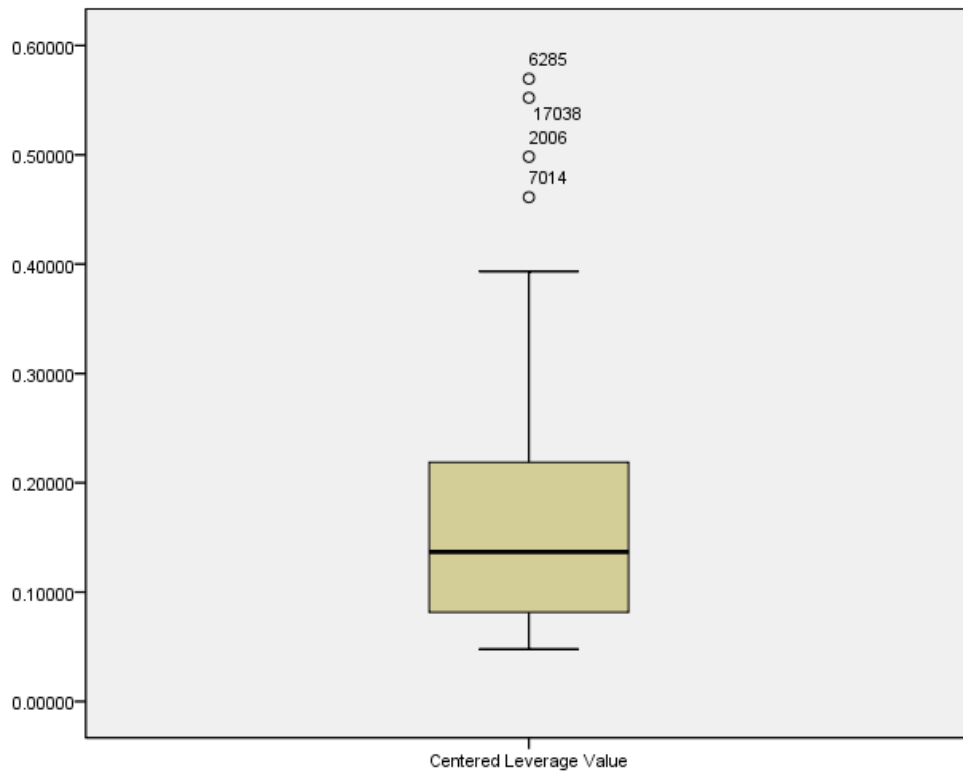


Normal P-P Plot of Regression Standardized Residual

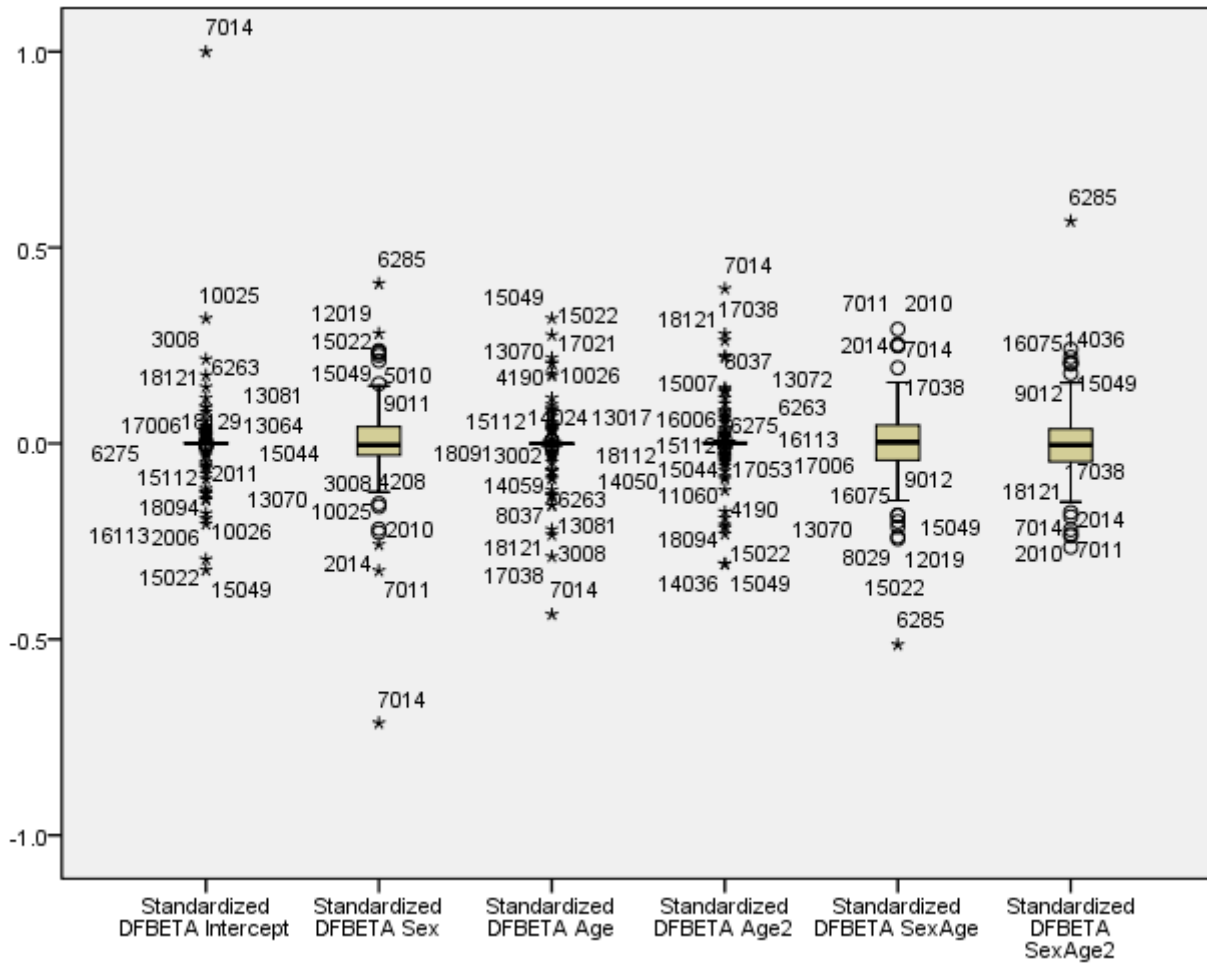


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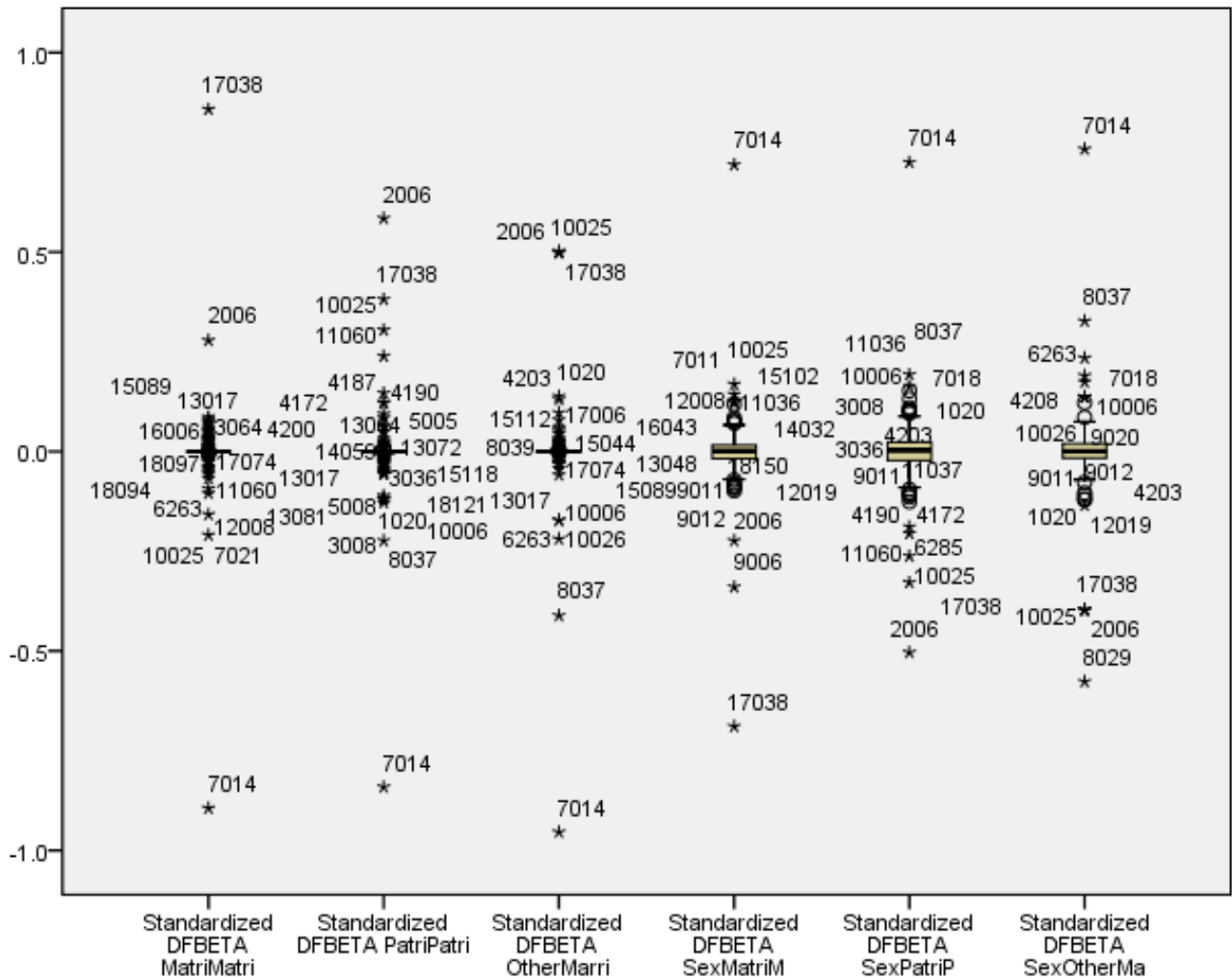




Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01



Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01



CASE Statistics question 1

Variables	Case 02006	Case 04208	Case 06285	Case 07014	Case 07018	Case 08029	Case 08037	Case 10006	Case 10025	Case 15118	Case 17038	Case 18094
Generosity	-40	-100	0	0	0	-60	-120	-100	0	60	0	60
MatriMatri	0	0	0	0	0	0	0	0	0	1	0	1
MatriPatri	1	0	0	1	1	0	0	0	0	0	1	0
PatriPatri	0	1	0	0	0	0	0	0	0	0	0	0
OtherMarri	0	0	1	0	0	1	1	1	1	1	0	0
OwnMatti	0	1	1	0	0	0	0	0	0	1	0	1
OwnRadio	1	1	0	1	1	1	1	1	0	1	0	1
SexMatriM	0	0	0	0	0	0	0	0	0	0	0	0
SexMatriP	0	0	0	0	0	0	0	0	0	0	0	0
SexPatriP	0	1	0	0	0	0	0	0	0	0	0	0
SexOtherMa	0	0	1	0	0	1	0	0	0	0	0	0
SexOwnMatti	0	1	1	0	0	0	0	0	0	0	0	0
SexOwnRadio	0	1	0	0	0	1	0	0	0	0	0	0

Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01

SexAge	0	27	85	0	0	35	0	0	0	0	0	0
SexAge2	0	729	7 225	0	0	1225	0	0	0	0	0	0
Sex	0	1	1	0	0	1	0	0	0	0	0	0
Age	52	27	85	25	25	35	48	48	28	27	47	32
Age2	2 704	729	7 225	625	625	1225	2 304	2 304	784	729	2 209	1 024
North	1	1	1	0	0	0	0	0	0	0	0	0
Central	0	0	0	1	1	1	1	1	1	0	0	0
South	0	0	0	0	0	0	0	0	0	1	1	1
SexNorth	0	1	1	0	0	0	0	0	0	0	0	0
SexCentral	0	0	0	0	0	1	0	0	0	0	0	0
SexSouth	0	0	0	0	0	0	0	0	0	0	0	0

CASE Statistics question 1

Variables	Case 2006	Case 4208	Case 6285	Case 7014	Case 7018	Case 8029	Case 8037	Case 10006	Case 10025	Case 15118	Case 17038	Case 18094
PRE_1	-25,87	-26,43	-25,54	-31,65	-37,58	-14,33	-76,72	-76,72	-58,65	14,42	17,52	14,97
RES_1	-14,13	-73,57	25,54	31,65	-62,42	-45,67	-43,28	-23,28	58,65	45,58	-17,52	45,03
ZPR_1	-0,23	-0,26	-0,22	-0,52	-0,81	0,34	-2,76	-2,76	-1,86	1,77	1,93	1,80
ZRE_1	-0,46	-2,41	0,84	1,04	-2,04	-1,49	-1,42	-0,76	1,92	1,49	-0,57	1,47
COO_1	0,02	0,07	0,11	0,09	0,03	0,06	0,04	0,01	0,08	0,02	0,05	0,02
LEV_1	0,50	0,16	0,57	0,46	0,11	0,26	0,21	0,21	0,23	0,14	0,55	0,15
DFB0_1	-7,51	0,00	0,00	38,77	0,00	0,00	3,12	1,68	12,18	-2,13	-3,53	-7,95
DFB1_1	7,51	-8,52	22,23	-38,77	-2,15	12,63	-3,12	-1,68	-12,18	2,13	3,53	7,95
DFB2_1	0,00	0,00	0,00	-0,67	0,00	0,00	-0,20	-0,11	-0,18	0,05	-0,45	0,31
DFB3_1	0,00	0,00	0,00	0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
DFB4_1	0,00	0,26	-1,19	0,67	0,17	-0,55	0,20	0,11	0,18	-0,05	0,45	-0,31
DFB5_1	0,00	0,00	0,01	-0,01	0,00	0,01	0,00	0,00	0,00	0,00	0,00	0,00
DFB6_1	1,14	0,00	0,00	-1,07	0,00	0,00	0,93	0,50	-1,07	6,08	-2,30	6,54
DFB7_1	-0,71	0,00	0,00	2,09	0,00	0,00	-1,88	-1,01	-2,70	1,10	2,39	0,63
DFB8_1	-1,14	-11,33	1,65	1,07	4,01	3,17	-0,93	-0,50	1,07	-6,08	2,30	-6,54
DFB9_1	0,71	1,03	-0,54	-2,09	-3,61	-2,02	1,88	1,01	2,70	-1,10	-2,39	-0,63
DFB10_1	-5,71	0,00	0,00	-5,81	0,00	0,00	7,61	4,10	-11,09	-2,24	4,07	-2,46
DFB11_1	2,23	0,00	0,00	-7,12	0,00	0,00	-0,16	-0,08	-2,48	2,77	-7,87	3,19
DFB12_1	5,71	-1,38	5,90	5,81	-0,08	0,79	-7,61	-4,10	11,09	2,24	-4,07	2,46
DFB13_1	-2,23	0,91	-0,65	7,12	2,52	-0,61	0,16	0,08	2,48	-2,77	7,87	-3,19
DFB14_1	6,05	0,00	0,00	-19,26	0,00	0,00	1,61	0,87	-3,35	-1,17	18,60	-0,83
DFB15_1	13,31	0,00	0,00	-18,99	0,00	0,00	-5,03	-2,71	6,77	-0,66	8,67	-0,33
DFB16_1	10,91	0,00	0,00	-20,70	0,00	0,00	-8,90	-4,79	10,72	-0,05	10,88	-0,03
DFB17_1	-6,05	-0,72	-0,44	19,26	1,86	-0,07	-1,61	-0,87	3,35	1,17	-18,60	0,83
DFB18_1	-13,31	-1,25	-4,96	18,99	3,40	-1,30	5,03	2,71	-6,77	0,66	-8,67	0,33
DFB19_1	-10,91	3,63	6,41	20,70	3,29	-15,65	8,90	4,79	-10,72	0,05	-10,88	0,03

Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01

TABLES QUESTION 2

Principal components of selected trust questions from the Malawi study

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
M2.d. Mistrust in Traditional Authorities	2.22	1.169	244
M2.e. Mistrust in group village headmen	2.32	1.202	244
M2.f. Mistrust in village headmen	2.32	1.218	244
M2.j. Mistrust in police	2.37	1.278	244
M2.k. Mistrust in traders	3.52	1.316	244
M2.l. Mistrust in teachers	2.14	1.087	244
M2.m. Mistrust in school administrators	2.29	1.162	244
M2.n. Mistrust in religious leaders	2.07	1.102	244
M3.a. Mistrust in family members	1.59	.936	244
M3.b. Mistrust in relatives	2.11	1.148	244
M3.c. Mistrust in people in own village	2.64	1.097	244
M3.d. Mistrust in people outside the village	3.27	1.120	244
M3.e. Mistrust in people of same ethnic group	2.87	1.092	244
M3.f. Mistrust in people outside ethnic group	3.21	1.117	244
M3.g. Mistrust in people from same church/mosque	2.35	1.065	244
M3.h. Mistrust in people not from same church/mosque	2.98	1.207	244

Total Variance Explained

Comp onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.545	40.905	40.905	6.545	40.905	40.905	2.937	18.355	18.355
2	1.617	10.108	51.013	1.617	10.108	51.013	2.738	17.112	35.467
3	1.332	8.323	59.335	1.332	8.323	59.335	2.534	15.837	51.304
4	1.131	7.066	66.402	1.131	7.066	66.402	2.416	15.097	66.402
5	.859	5.369	71.771						
6	.743	4.642	76.413						
7	.709	4.430	80.843						
8	.613	3.832	84.675						
9	.502	3.140	87.815						
10	.473	2.957	90.772						
11	.375	2.345	93.117						
12	.273	1.708	94.825						
13	.256	1.601	96.425						
14	.236	1.473	97.898						
15	.206	1.289	99.188						
16	.130	.812	100.000						

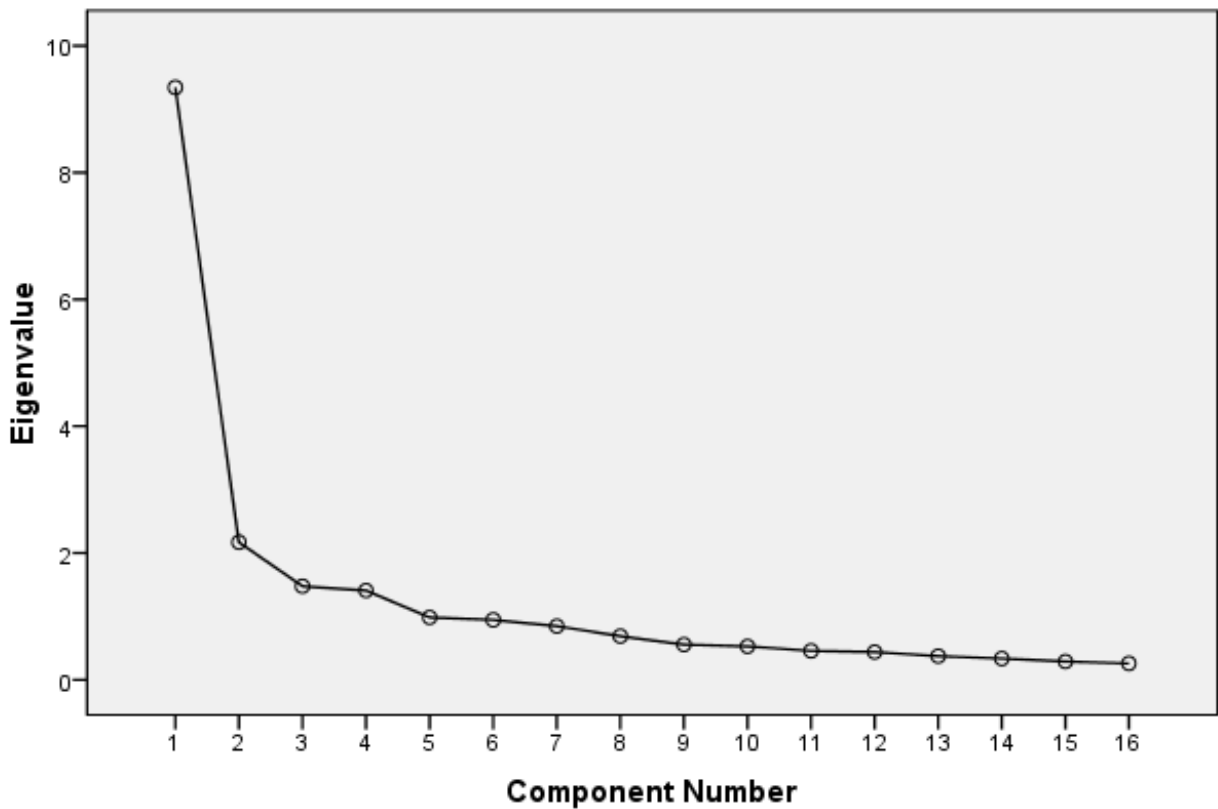
Extraction Method: Principal Component Analysis.

KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.907
Bartlett's Test of Sphericity	Approx. Chi-Square	2043.108
	df	120.000
	Sig.	.000

a. Based on correlations

Scree Plot



Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01

Rotated Component Matrix ^a				
	Rescaled Component			
	1	2	3	4
M2.d. Mistrust in Traditional Authorities	.185	.853	.142	.133
M2.e. Mistrust in group village headmen	.248	.866	.155	.145
M2.f. Mistrust in village headmen	.163	.764	.333	.247
M2.j. Mistrust in police	.293	.425	.050	.597
M2.k. Mistrust in traders	.215	.074	.130	.868
M2.l. Mistrust in teachers	.099	.437	.408	.465
M2.m. Mistrust in school administrators	.121	.372	.426	.546
M2.n. Mistrust in religious leaders	.109	.321	.616	.222
M3.a. Mistrust in family members	.205	.172	.654	.031
M3.b. Mistrust in relatives	.222	.014	.803	.122
M3.c. Mistrust in people in own village	.496	.181	.542	.211
M3.d. Mistrust in people outside the village	.690	.098	.167	.188
M3.e. Mistrust in people of same ethnic group	.808	.233	.252	.043
M3.f. Mistrust in people outside ethnic group	.814	.151	.221	.149
M3.g. Mistrust in people from same church/mosque	.408	.237	.511	.100
M3.h. Mistrust in people not from same church/mosque	.796	.154	.146	.178

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 6 iterations.

Total Variance Explained

	Component	Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %
Raw	1	4.151	19.684	19.684
	2	4.054	19.227	38.912
	3	3.238	15.358	54.269
	4	2.953	14.005	68.274
Rescaled	1	3.219	20.118	20.118
	2	2.908	18.177	38.295
	3	2.691	16.816	55.111
	4	1.933	12.081	67.192

Extraction Method: Principal Component Analysis.

Component Score Coefficient Matrix^a

	Component			
	1	2	3	4
M2.d. Mistrust in Traditional Authorities	-.027	.421	-.114	-.136
M2.e. Mistrust in group village headmen	.002	.441	-.130	-.147
M2.f. Mistrust in village headmen	-.100	.337	.042	-.060
M2.j. Mistrust in police	.043	.091	-.247	.380
M2.k. Mistrust in traders	-.036	-.248	-.131	.763
M2.l. Mistrust in teachers	-.124	.055	.119	.157
M2.m. Mistrust in school administrators	-.138	.003	.143	.249
M2.n. Mistrust in religious leaders	-.131	.011	.317	-.012
M3.a. Mistrust in family members	-.043	-.030	.269	-.093
M3.b. Mistrust in relatives	-.088	-.180	.526	-.063
M3.c. Mistrust in people in own village	.085	-.077	.204	-.024
M3.d. Mistrust in people outside the village	.281	-.072	-.081	.009
M3.e. Mistrust in people of same ethnic group	.311	.005	-.046	-.140
M3.f. Mistrust in people outside ethnic group	.330	-.055	-.073	-.051
M3.g. Mistrust in people from same church/mosque	.054	-.014	.197	-.091
M3.h. Mistrust in people not from same church/mosque	.390	-.053	-.148	-.022

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

a. Coefficients are standardized.

For each case and each component, the component score is computed by multiplying the case's standardized variable values (computed using listwise deletion) by the component's score coefficients. The resulting component score variables are representative of, and can be used in place of, the original variables with some loss of information.

TABLES QUESTION 3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Mistrust of locals 244 cases = MistLoca244 ^a	103	-2.25542	2.83231	-.0395262	.94261378
Mistrust of outsiders 244 cases = MistOuts244 ^a	103	-2.59681	2.71402	.0654729	.98419632
Mistrust of traditional authorities 244 cases = MistTA244 ^a	103	-2.33551	3.09894	.0444267	1.05185159
Mistrust of modern authorities 244 cases = MistMA244 ^a	103	-3.20264	2.31673	-.0050544	1.01545742
Valid N (listwise)	103				

^a Index estimated on 244 cases

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	102	83.6
	Missing Cases	20	16.4
	Total	122	100.0
Unselected Cases		0	.0
	Total	122	100.0

a. If weight is in effect, see classification table for the total number of cases.

MODEL 0

Iteration History^{a,b,c}

Iteration	-2 Log likelihood	Coefficients	
		Constant	
Step 0 1	139.987		-.235
2	139.987		-.236
3	139.987		-.236

a. Constant is included in the model.

b. Initial -2 Log Likelihood: 139.987

c. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

Classification Table^{a,b}

Observed		Predicted		
		1 = Trust in other people		
		0	1	Percentage Correct
Step 0 1 = Trust in other people	0	57	0	100.0
	1	45	0	.0
Overall Percentage				55.9

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 0 Constant	-.236	.199	1.405	1	.236	.789

MODEL 1

Iteration History^{a,b,c,d}

Iteration	-2 Log likelihood	Coefficients				
		Constant	MistLoca244	MistOuts244	MistTA244	MistMA244
Step 1 1	115.726	-.218	-.766	-.653	.093	-.041
2	114.660	-.301	-.975	-.807	.105	-.046
3	114.647	-.313	-1.001	-.825	.106	-.046
4	114.647	-.313	-1.001	-.826	.106	-.046

a. Method: Enter

b. Constant is included in the model.

c. Initial -2 Log Likelihood: 139.987

d. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step 1 Step	25.340	4	.000
Block	25.340	4	.000
Model	25.340	4	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	114.647 ^a	.220	.295

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table^a

Observed		Predicted		
		1 = Trust in other people		
		0	1	Percentage Correct
Step 1 1 = Trust in other people	0	43	14	75.4
	1	15	30	66.7
Overall Percentage				71.6

a. The cut value is .500

Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
								Lower	Upper
Step 1	MistLoca244	-1.001	.280	12.819	1	.000	.367	.212	.636
	MistOuts244	-.826	.250	10.889	1	.001	.438	.268	.715
	MistTA244	.106	.226	.218	1	.641	1.111	.713	1.731
	MistMA244	-.046	.232	.039	1	.843	.955	.606	1.505
	Constant	-.313	.232	1.830	1	.176	.731		

Correlation of parameter estimates

		Constant	MistLoca244	MistOuts244	MistTA244	MistMA244
Step 1	Constant	1.000	.197	.054	-.033	-.038
	MistLoca244	.197	1.000	.288	-.006	.011
	MistOuts244	.054	.288	1.000	-.062	.085
	MistTA244	-.033	-.006	-.062	1.000	.084
	MistMA244	-.038	.011	.085	.084	1.000

MODEL 2

Iteration History^{a,b,c,d}

Iteration		-2 Log likelihood	Coefficients					Sex
			Constant	MistLoca244	MistOuts244	MistTA244	MistMA244	
Step 1	1	115.373	-.097	-.773	-.669	.096	-.035	-.226
	2	114.279	-.151	-.986	-.828	.115	-.037	-.280
	3	114.265	-.159	-1.013	-.848	.117	-.037	-.287
	4	114.265	-.159	-1.014	-.848	.117	-.037	-.287

a. Method: Enter

b. Constant is included in the model.

c. Initial -2 Log Likelihood: 114.647

d. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.382	1	.536
	Block	.382	1	.536
	Model	25.722	5	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	114.265 ^a	.223	.299

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table^a

Observed		Predicted		
		0	1	Percentage Correct
Step 1	1 = Trust in other people	0	1	
		42	15	73.7
		13	32	71.1
Overall Percentage				72.5

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1	MistLoca244	-1.014	.282	12.932	1	.000	.363
	MistOuts244	-.848	.255	11.062	1	.001	.428
	MistTA244	.117	.230	.258	1	.611	1.124
	MistMA244	-.037	.236	.025	1	.875	.963
	Sex	-.287	.465	.379	1	.538	.751
	Constant	-.159	.340	.220	1	.639	.853

Correlation of parameter estimates

		Constant	MistLoca244	MistOuts244	MistTA244	MistMA244	Sex
Step 1	Constant	1.000	.066	-.089	.037	.005	-.730
	MistLoca244	.066	1.000	.291	-.018	.012	.093
	MistOuts244	-.089	.291	1.000	-.082	.073	.165
	MistTA244	.037	-.018	-.082	1.000	.075	-.084
	MistMA244	.005	.012	.073	.075	1.000	-.057
	Sex	-.730	.093	.165	-.084	-.057	1.000

MODEL 3

Iteration History^{a,b,c,d}

Iteration	-2 Log likelihood	Coefficients										
		Constant	MistLoca 244	MistOuts 244	MistTA 244	MistM A244	Sex	SexMis tLo244	SexMist Out244	SexMistT A244	SexMist MA244	
Step 1	105.053	-.050	-.560	-.945	.592	.057	-.227	-.315	.369	-1.041	-.264	
1	2	101.009	-.041	-.824	-1.414	1.025	.010	-.373	-.334	.670	-1.612	-.257
	3	100.440	-.043	-.983	-1.689	1.313	-.036	-.400	-.228	.913	-1.926	-.219
	4	100.414	-.048	-1.029	-1.766	1.393	-.048	-.397	-.183	.988	-2.006	-.206
	5	100.413	-.049	-1.032	-1.770	1.397	-.049	-.396	-.180	.992	-2.010	-.206
	6	100.413	-.049	-1.032	-1.770	1.397	-.049	-.396	-.180	.992	-2.010	-.206

- a. Method: Enter
- b. Constant is included in the model.
- c. Initial -2 Log Likelihood: 114.265
- d. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step 1 Step	13.852	4	.008
Block	13.852	4	.008
Model	39.574	9	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	100.413 ^a	.322	.431

- a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Classification Table^a

Observed		Predicted		
		1 = Trust in other people		
		0	1	Percentage Correct
Step 1	1 = Trust in other people 0	41	16	71.9
	1	13	32	71.1
Overall Percentage				71.6

- a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1	MistLoca244	-1.032	.554	3.468	1	.063	.356
	MistOuts244	-1.770	.619	8.173	1	.004	.170
	MistTA244	1.397	.589	5.625	1	.018	4.043
	MistMA244	-.049	.397	.015	1	.903	.953
	Sex	-.396	.514	.593	1	.441	.673
	SexMistLo244	-.180	.694	.068	1	.795	.835
	SexMistOut244	.992	.728	1.859	1	.173	2.698
	SexMistTA244	-2.010	.683	8.665	1	.003	.134
	SexMistMA244	-.206	.548	.141	1	.707	.814
	Constant	-.049	.386	.016	1	.900	.952

Correlation of estimated parameters

	Constant	MistLo ca244	MistOuts 244	MistTA 244	MistM A244	Sex	SexMis tLo244	SexMist Out244	SexMis tTA244	SexMist MA244	
Step 1	Constant	1.000	.080	-.094	-.016	-.053	-.751	-.064	.080	.014	.039
	MistLoca244	.080	1.000	.252	-.384	-.069	-.060	-.799	-.215	.331	.050
	MistOuts244	-.094	.252	1.000	-.632	.019	.070	-.201	-.851	.545	-.014
	MistTA244	-.016	-.384	-.632	1.000	-.156	.012	.306	.538	-.862	.113
	MistMA244	-.053	-.069	.019	-.156	1.000	.040	.055	-.016	.134	-.725
	Sex	-.751	-.060	.070	.012	.040	1.000	.178	.011	.022	-.034
	SexMistLo244	-.064	-.799	-.201	.306	.055	.178	1.000	.327	-.191	.076
	SexMistOut244	.080	-.215	-.851	.538	-.016	.011	.327	1.000	-.405	.146
	SexMistTA244	.014	.331	.545	-.862	.134	.022	-.191	-.405	1.000	-.006
	SexMistMA244	.039	.050	-.014	.113	-.725	-.034	.076	.146	-.006	1.000

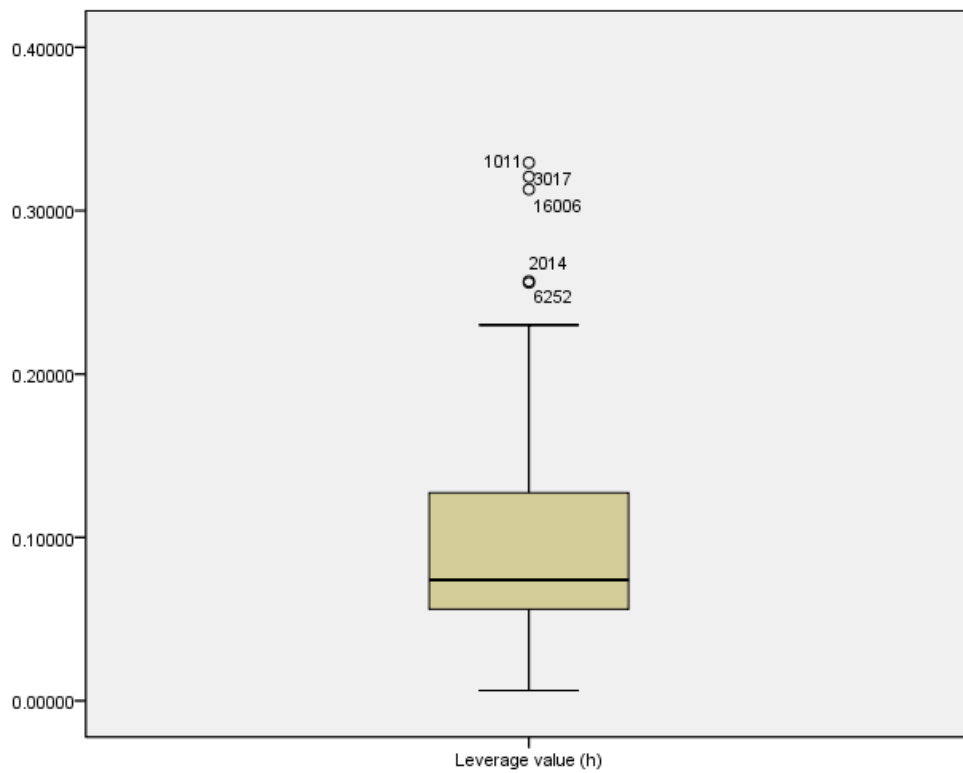
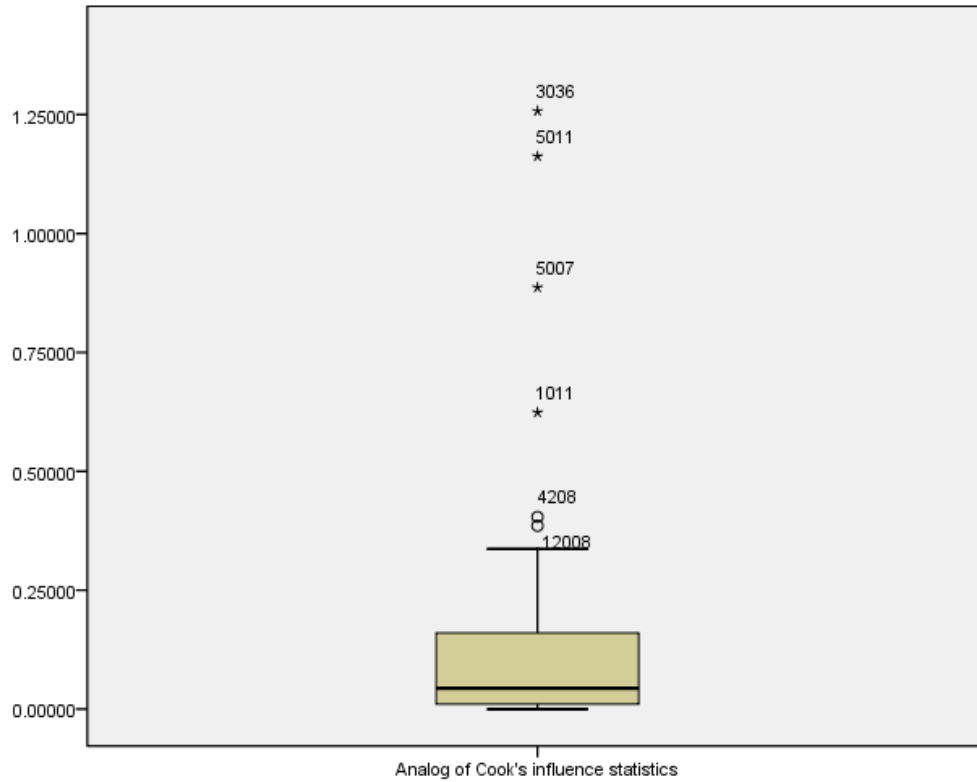
Casewise List^b

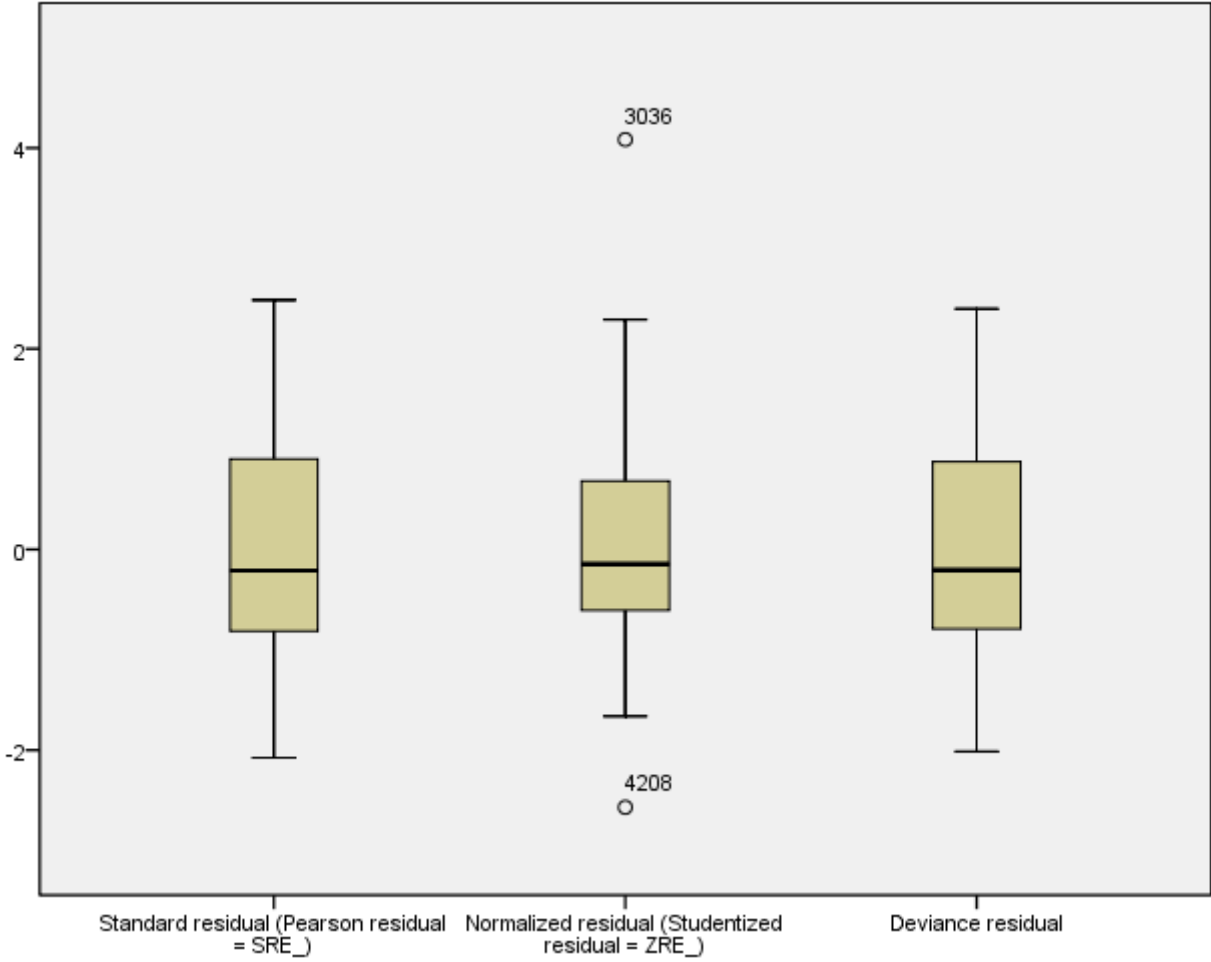
HHid #	Selected Status ^a	Observed	Predicted	Predicted Group	Temporary Variable	
		1 = Trust in other people			Resid	ZResid
4208	S	0**	.868	1	-.868	-2.570
3036	S	1**	.057	0	.943	4.085
5011	S	1**	.160	0	.840	2.290

a. S = Selected, U = Unselected cases, and ** = Misclassified cases.

b. Cases with studentized residuals greater than 2.000 are listed.

Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01





Tabellvedlegg til eksamensoppgaver/ Tables attachment for examination questions for SOS3003 2009/12/01

Case statistics question 3

Case no	1011	3017	3036	4208	5007	5011	16006
Generosity	-60	-40	-40	-100	0	0	0
MatriMatri	0	0	0	0	0	0	1
MatriPatri	0	0	0	0	0	0	0
PatriPatri	1	1	1	1	1	1	0
OtherMarri	0	0	0	0	0	0	0
OwnMatr	0	0	1	1	1	0	0
OwnRadio	1	1	1	1	1	1	0
Sex	1	1	0	1	0	1	0
Age	24	29	32	27	52	37	30
North	1	1	1	1	1	1	0
Central	0	0	0	0	0	0	0
South	0	0	0	0	0	0	1
MistOuts266	-2.4306	2.2644	-0.1260	-0.6005	0.2379	0.6702	-2.6825
MistLoca266	1.0947	-2.1736	0.3341	-1.0254	2.4401	1.0559	0.6911
MistOuts244	-1.8930	2.7022	0.0330	-0.0953	0.3031	1.0814	-2.5968
MistTA244	-1.0851	-0.9336	-1.3187	-0.7345	1.0120	-2.3355	-1.3953
MistLoca244	1.4884	-1.6699	0.8303	-1.5057	1.9440	1.3638	0.8460
MistMA244	-1.5302	-2.0398	0.1697	0.0687	0.6104	0.5915	1.2884
PREDPROB	0.5692	0.6384	0.0565	0.8684	0.2302	0.1601	0.8407
PREDGROUP	1	1	0	1	0	0	1
COOKsINFLU	0.6237	0.2781	1.2577	0.4041	0.8866	1.1624	0.0863
LEVERAGE	0.3206	0.3293	0.0700	0.0576	0.2095	0.1814	0.3130
RESIPROB	-0.5692	0.3615	0.9434	-0.8684	0.7697	0.8398	0.1592
RESILOGIT	-2.3212	1.5662	17.6854	-7.6035	4.3436	6.2450	1.1894
RESIstand	-1.5745	1.1567	2.4856	-2.0749	1.9277	2.1155	0.7106
RESInorm	-1.1494	0.7525	4.0847	-2.5697	1.8285	2.2902	0.4352
DEVIANCE	-1.2977	0.9473	2.3969	-2.0142	1.7138	1.9140	0.5890