

LOC Association Rules: Cascade Approach

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1 Demographics

1.1 Participant Characteristics

	Full Sample	LOC	
		Yes	No
Total(<i>N</i>)	177	37	121
LOC Not Reported	19		
Age(Mean (SD))	9.19 (1.32)	8.89 (1.31)	9.28 (1.37)
Sex(<i>N</i>)			
Male	91	19	63
Female	86	18	58
BMI percentile(Mean (SD))	60.02 (28.48)	71.49 (26.24)	57.64 (27.64)
BMI Status(<i>N</i>)			
Obese	23	8	13
Overweight	24	7	14
Healthy Weight	128	22	93
Underweight	2	0	1
Ethnicity(<i>N</i>)			
Hispanic/Latino	8	2	5
Not Hispanic/Latino	126	33	76
Not Reported	42	2	34
Race ^A (<i>N</i>)			
Black/African American	6	4	2
White	161	31	114
Other	8	1	4
Not Reported	2	1	1
SES(<i>N</i>)			
> \$100,000	49	6	40
\$50,000 – \$100,000	83	21	54
< \$50,000	40	10	24
Not Reported	5	0	3
Breast Fed Duration(<i>N</i>)			
Never	53	10	30
1-3 months	15	3	12
4-6 months	51	13	35
7-9 months	36	5	31
10+ months	18	5	11
Not Reported	4	1	2

^AFisher's exact test p<0.05

1.2 Parent Characteristics

	Full Sample	LOC	
		Yes	No
Total(N)	177	37	121
LOC Not Reported	19		
Breast Fed Duration(N)			
Never	53	10	30
1-3 months	15	3	12
4-6 months	51	13	35
7-9 months	36	5	31
10+ months	18	5	11
Not Reported	4	1	2
Maternal Ed ^A (N)			
High School	26	10	11
Post High School	145	26	105
Not Reported	6	1	5
Paternal Ed(N)			
High School	37	9	22
Post High School	129	25	92
Not Reported	11	3	7
Maternal BMI Status(N)			
Severely Obese (BMI 35+)	20	8	11
Obese	18	4	13
Overweight	25	5	19
Healthy Weight	75	15	57
Underweight	4	2	2
Not Reported	35	3	19
Paternal BMI Status(N)			
Severely Obese (BMI 35+)	21	5	12
Obese	30	7	22
Overweight	66	15	46
Healthy Weight	51	9	34
Underweight	0	0	0
Not Reported	9	1	7

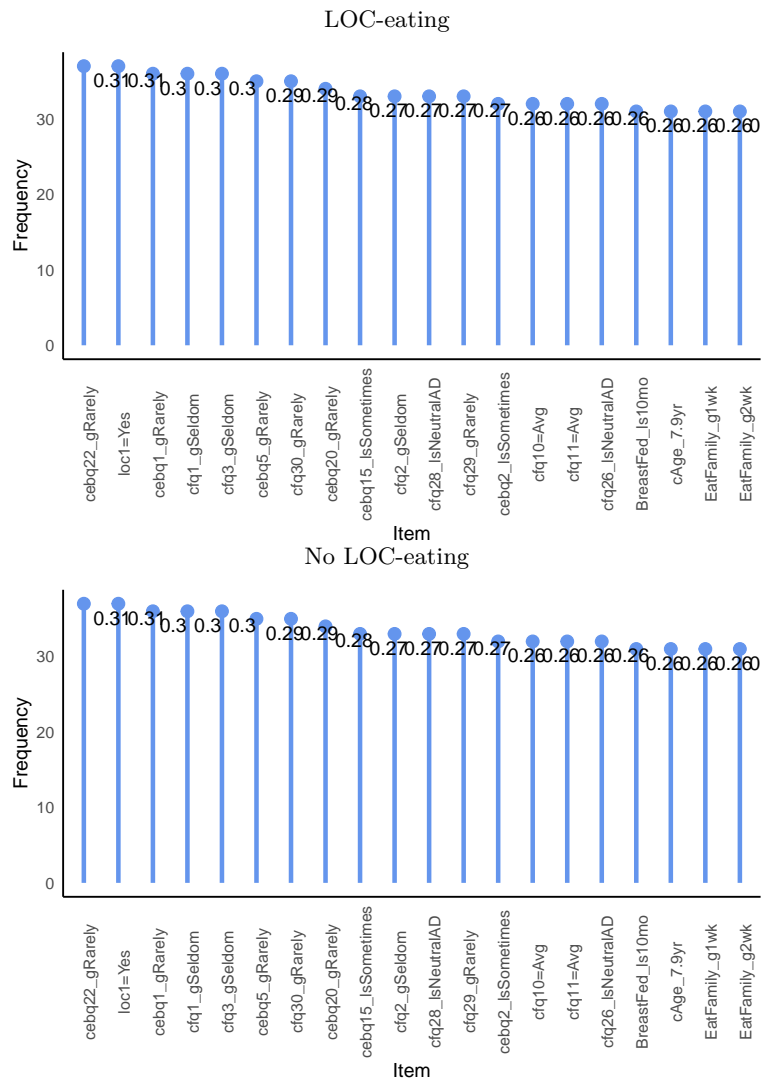
^AFisher's exact test $p < 0.05$

2 CEBQ and CFQ by LOC status

	Full Sample		LOC					
			Yes		No		d	p
	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	Range		
CEBQ-FR	2.54 (0.72)	[1, 4.75]	2.78 (0.88)	[1, 4]	2.46 (0.63)	[1, 4.75]	0.46	0.044
CEBQ-EOE	2.13 (0.64)	[1, 3.8]	2.20 (0.75)	[1, 3.8]	2.10 (0.61)	[1, 3.8]	0.15	0.478
CEBQ-EF	3.78 (0.66)	[1.75, 5]	3.90 (0.63)	[2.5, 5]	3.74 (0.67)	[1.75, 5]	0.25	0.178
CEBQ-DD	2.59 (0.90)	[1, 4.7]	2.73 (1.09)	[1, 4.7]	2.55 (0.84)	[1, 4.7]	0.20	0.350
CEBQ-SR	2.84 (0.61)	[1.4, 4.2]	2.63 (0.67)	[1.4, 4.2]	2.92 (0.57)	[1.4, 4.2]	0.49	0.019*
CEBQ-SE	2.70 (0.73)	[1, 4.75]	2.59 (0.87)	[1.25, 4.5]	2.75 (0.68)	[1.5, 4.75]	0.19	0.310
CEBQ-EUE	2.64 (0.79)	[1, 5]	2.48 (0.64)	[1.33, 3.67]	2.68 (0.84)	[1, 5]	0.25	0.129
CEBQ-FF	2.85 (0.89)	[1, 5]	3.08 (1.0)	[1.33, 5]	2.77 (0.84)	[1, 5]	0.35	0.099 [†]
CFQ-PR	4.02 (0.71)	[2, 5]	4 (0.74)	[2, 5]	4.02 (0.68)	[2.33, 5]	0.02	0.910
CFQ-PPW	3.16 (0.49)	[2, 5]	3.22 (0.57)	[2.25, 5]	3.14 (0.48)	[2, 4.5]	0.15	0.460
CFQ-PCW	2.92 (0.37)	[1.4, 4.2]	3.01 (0.33)	[2, 4]	2.92 (0.33)	[2, 4.2]	0.29	0.137
CFQ-CONC	2.84 (1.69)	[1, 5]	2.64 (1.73)	[1, 5]	2.88 (1.68)	[1, 5]	0.18	0.350
CFQ-REST	3.19 (0.88)	[1, 4.88]	3.14 (0.94)	[1.25, 4.63]	3.24 (0.87)	[1, 4.88]	0.12	0.563
CFQ-PE	2.16 (0.90)	[1, 4.5]	1.86 (0.77)	[1, 4.25]	2.24 (0.89)	[1, 4.5]	0.43	0.018*
CFQ-MON	3.68 (0.90)	[1, 5]	3.85 (0.95)	[2, 5]	3.61 (0.89)	[1, 5]	0.26	0.194

All but CFQ-PR have 2 missing in full sample; CFQ-PR has 16 missing in full sample.

3 Frequency of Items by LOC status



4 Determinants of LOC

4.1 Step 1: Single Predictor

Confidence = 0.33

Support = 0.06 (25%, n=9)

29 rules were identified:

- all 11 had $\kappa \geq 0.20$
- all 29 had added value ≥ 0.05
- of the 11 remaining, all 11 were significant after controlling for multiple comparisons

Table 1: Determinants of LOC-Single Predictors

LHS	count	support	confidence	lift	addVal	kappa	fisher.padj_holm	Cat
cebq12_gRarely	20	0.127	0.364	1.553	0.129	0.215	0.035	gR_FR
cebq33_gSometimes	17	0.108	0.378	1.613	0.144	0.212	0.035	gS_FF
cebq34_gRarely	16	0.101	0.457	1.952	0.223	0.281	0.007	gR_FR
cebq7_gSometimes	17	0.108	0.386	1.650	0.152	0.222	0.035	gS_FF
cfq20=Agree	19	0.120	0.365	1.560	0.131	0.211	0.035	gRest
cfq23_lsNeutralAD	15	0.095	0.429	1.830	0.194	0.245	0.024	lsN_Rest
cfq26=Disagree	28	0.177	0.400	1.708	0.166	0.313	0.000	lsPE
cfq28=Disagree	26	0.165	0.361	1.542	0.127	0.243	0.005	lsPE
cfq29=Always	15	0.095	0.395	1.686	0.161	0.213	0.035	gMon
cfq31=Always	11	0.070	0.440	1.879	0.206	0.205	0.035	gMon
mEducation_HS	10	0.063	0.476	2.033	0.242	0.211	0.035	mEducation_HS

4.1.1 Crosstable of rule categories

Table 2: Determinants of LOC-Cross Tab of Single Predictors

Cat	Freq
gMon	2
gR_FR	2
gRest	1
gS_FF	2
lsN_Rest	1
lsPE	2
mEducation_HS	1

4.2 Step 2: Multiple Predictors

Confidence = 0.50

Support = 0.08 (33%, n = 12)

48 rules were identified:

- all 48 had $\kappa \geq 0.20$
- all 48 had added value ≥ 0.05
- all 48 significant after controlling for multiple comparisons

Table 3: Determinants of LOC-Multiple Predictors

LHS2	LHS1	count	support	confidence	lift	addVal	kappa	fisher.padj_holm	Cluster_gupta4	Cat1
cebq10_gSometimesRev	cebq1_gSometimes	13	0.082	0.500	2.135	0.266	0.272	0.009	4	gS_EF
cebq10_lsSometimesRev	cebq1_gSometimes	13	0.082	0.500	2.135	0.266	0.272	0.009	4	gS_EF
cebq12_gRarely	cfq26=Disagree	16	0.101	0.500	2.135	0.266	0.315	0.005	2	lsPE
cebq14_gRarely	cebq7_gSometimes	13	0.082	0.520	2.221	0.286	0.284	0.009	4	gS_FF
cebq14_gRarely	cfq26=Disagree	19	0.120	0.528	2.254	0.294	0.377	0.000	2	lsPE
cebq19_gRarely	cfq26=Disagree	21	0.133	0.538	2.299	0.304	0.411	0.000	1	lsPE
cebq26_lsSometimes	cebq19_gRarely	16	0.101	0.571	2.440	0.337	0.364	0.001	2	gR_FR
cebq26_lsSometimes	cfq26=Disagree	17	0.108	0.515	2.200	0.281	0.340	0.002	2	lsPE
cebq26_lsSometimes	cebq12_gRarely	13	0.082	0.619	2.644	0.385	0.336	0.002	2	gR_FR
cebq27_gRarely	cfq26=Disagree	21	0.133	0.512	2.187	0.278	0.388	0.000	1	lsPE
cebq27_gRarely	cfq27=Disagree	13	0.082	0.542	2.313	0.307	0.297	0.007	3	lsPE
cebq27_gSometimes	cfq26=Disagree	13	0.082	0.650	2.776	0.416	0.349	0.001	2	lsPE
cebq30_lsSometimes	cebq12_gRarely	13	0.082	0.500	2.135	0.266	0.272	0.009	4	gR_FR
cebq30_lsSometimes	cebq19_gRarely	15	0.095	0.500	2.135	0.266	0.301	0.007	3	gR_FR
cebq30_lsSometimes	cebq14_gRarely	16	0.101	0.500	2.135	0.266	0.315	0.005	4	gR_FR
cebq33_gSometimes	BreastFed_ls7mo	15	0.095	0.556	2.372	0.321	0.338	0.002	3	BreastFed
cebq33_gSometimes	cebq1_gSometimes	16	0.101	0.571	2.440	0.337	0.364	0.001	2	gS_EF
cebq33_gSometimes	cfq28=Disagree	13	0.082	0.722	3.084	0.488	0.377	0.000	1	lsPE
cebq33_gSometimes	cebq14_gRarely	13	0.082	0.520	2.221	0.286	0.284	0.009	4	gR_FR
cebq33_gSometimes	cebq22_gSometimes	13	0.082	0.565	2.414	0.331	0.309	0.005	3	gS_EF
cebq34_gRarely	cebq20_gSometimes	13	0.082	0.520	2.221	0.286	0.284	0.009	4	gS_EF
cebq34_gRarely	cfq26=Disagree	15	0.095	0.682	2.912	0.448	0.404	0.000	1	lsPE
cebq34_gRarely	cAge_7.9yr	13	0.082	0.500	2.135	0.266	0.272	0.009	4	cAge_7.9
cebq34_gRarely	cebq13_lsSometimes	13	0.082	0.520	2.221	0.286	0.284	0.009	4	lsS_EOE
cebq34_gRarely	cfq28=Disagree	14	0.089	0.636	2.717	0.402	0.363	0.001	2	lsPE
cebq34_gRarely	cebq22_gSometimes	15	0.095	0.500	2.135	0.266	0.301	0.007	3	gS_EF
cebq34_gRarely	cebq5_gSometimes	15	0.095	0.556	2.372	0.321	0.338	0.002	2	gS_EF
cebq34_gRarely	cebq25_lsSometimes	13	0.082	0.565	2.414	0.331	0.309	0.005	3	lsS_EUE
cebq7_gSometimes	cebq1_gSometimes	15	0.095	0.577	2.464	0.343	0.351	0.001	2	gS_EF
cfq20_gNeutralAD	cebq34_gRarely	13	0.082	0.500	2.135	0.266	0.272	0.009	4	gR_FR
cfq21_lsNeutralAD	cfq20=Agree	14	0.089	0.583	2.491	0.349	0.337	0.002	2	gRest
cfq23_lsNeutralAD	cfq14_lsNeutralCon	14	0.089	0.500	2.135	0.266	0.287	0.009	3	lsN_Conc

Table 3: Determinants of LOC-Multiple Predictors (*continued*)

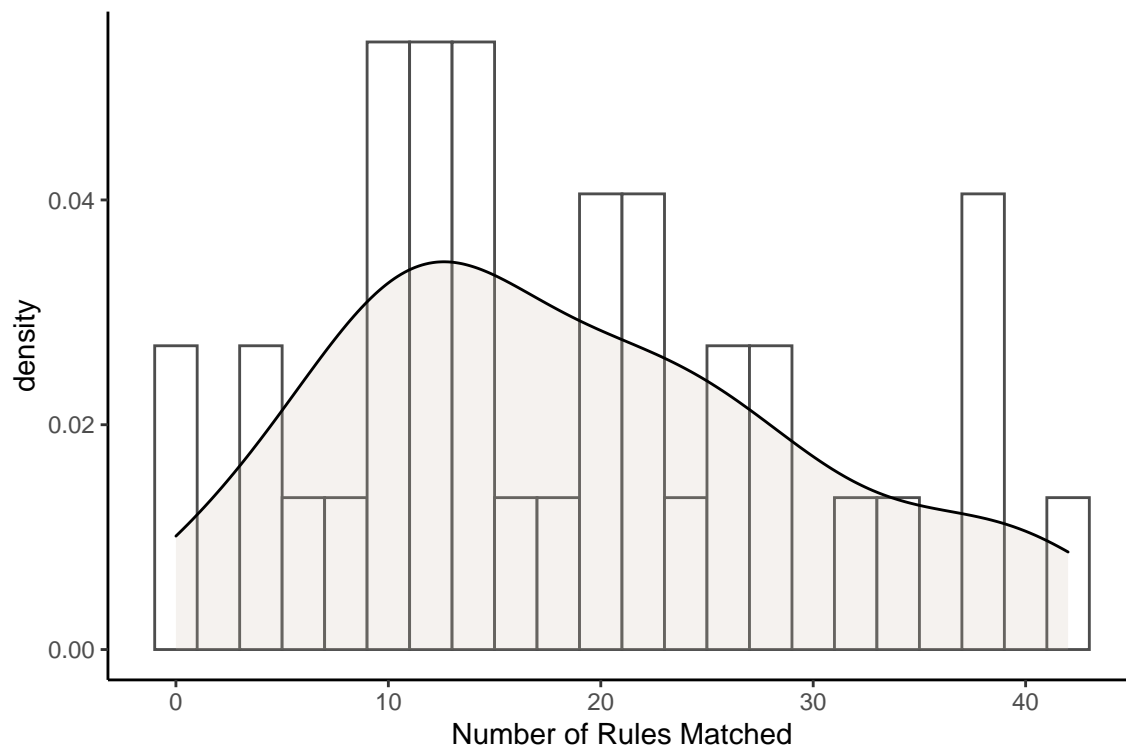
LHS2	LHS1	count	support	confidence	lift	addVal	kappa	fisher.padj_holm	Cluster_gupta4	Cat1
cfq23_lsNeutralAD	cAge_7.9yr	14	0.089	0.519	2.214	0.284	0.299	0.007	3	cAge_7.9
cfq23_lsNeutralAD	cebq21_gRarely	13	0.082	0.565	2.414	0.331	0.309	0.005	4	gR_SR
cfq23_lsNeutralAD	cfq14=Unconcerned	13	0.082	0.520	2.221	0.286	0.284	0.009	2	lsConc
cfq25_lsNeutralAD	cBMI_OWOB	14	0.089	0.500	2.135	0.266	0.287	0.009	3	cBMI_OW
cfq26_lsNeutralAD	cebq27_gSometimes	13	0.082	0.500	2.135	0.266	0.272	0.009	4	gS_EOE
cfq26_lsNeutralAD	cebq34_gRarely	16	0.101	0.571	2.440	0.337	0.364	0.001	2	gR_FR
cfq26_lsNeutralAD	cebq33_gSometimes	14	0.089	0.519	2.214	0.284	0.299	0.007	3	gS_FF
cfq26_lsNeutralAD	cebq7_gSometimes	14	0.089	0.519	2.214	0.284	0.299	0.007	3	gS_FF
cfq26=Disagree	cfq20=Agree	16	0.101	0.552	2.356	0.318	0.351	0.001	2	gRest
cfq26=Disagree	cBMI_OWOB	14	0.089	0.538	2.299	0.304	0.311	0.005	3	cBMI_OW
cfq26=Disagree	mBMI_OBOW	13	0.082	0.500	2.135	0.266	0.272	0.009	4	mBMI_O
cfq27_lsNeutralAD	cebq34_gRarely	14	0.089	0.667	2.847	0.432	0.377	0.000	2	gR_FR
cfq28_lsNeutralAD	cebq7_gSometimes	14	0.089	0.583	2.491	0.349	0.337	0.002	2	gS_FF
cfq28_lsNeutralAD	cebq27_gSometimes	13	0.082	0.520	2.221	0.286	0.284	0.009	4	gS_EOE
cfq28_lsNeutralAD	cebq33_gSometimes	14	0.089	0.560	2.391	0.326	0.324	0.003	3	gS_FF
cfq28_lsNeutralAD	cebq34_gRarely	16	0.101	0.552	2.356	0.318	0.351	0.001	2	gR_FR

4.2.1 Crosstable of rule categories

Table 4: Determinants of LOC-Cross tabs Multiple Predictors

	gN_Rest	gR_EOE	gR_FR	gS_EOE	gS_FF	lsN_PE	lsN_Rest	lsPE	lsS_FF	lsS_SR
BreastFed_ls7mo	0	0	0	0	1	0	0	0	0	0
cAge_7.9yr	0	0	1	0	0	0	1	0	0	0
cBMI_OWOB	0	0	0	0	0	1	0	1	0	0
gR_FR	1	0	0	0	1	3	0	0	0	5
gR_SR	0	0	0	0	0	0	1	0	0	0
gRest	0	0	0	0	0	0	1	1	0	0
gS_EF	0	0	3	0	4	0	0	0	1	0
gS_EOE	0	0	0	0	0	2	0	0	0	0
gS_FF	0	0	1	0	0	4	0	0	0	0
lsConc	0	0	0	0	0	0	1	0	0	0
lsN_Conc	0	0	0	0	0	0	1	0	0	0
lsPE	0	2	5	1	1	0	0	0	0	1
lsS_EOE	0	0	1	0	0	0	0	0	0	0
lsS_EUE	0	0	1	0	0	0	0	0	0	0
mBMI_OBOW	0	0	0	0	0	0	0	1	0	0

4.2.2 Endorsement of Rules



4.3 Clustering of Rules

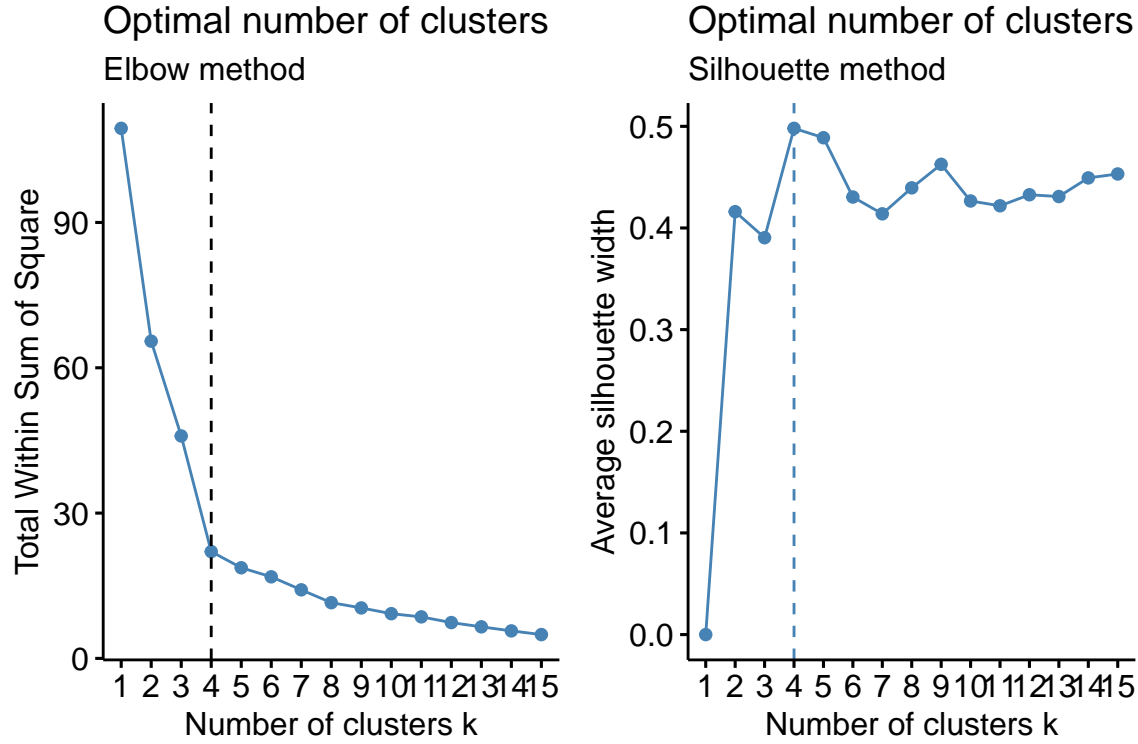


Table 5: Determinants of LOC-Cluster Metrics

measure	score_at5	method	clusters
Connectivity	0	pam	2
Dunn	0.593	pam	10
Silhouette	0.498	pam	4
APN	0	pam	4
AD	0.5054	pam	10
ADM	0	pam	4
FOM	0.0753	pam	10

Number of clusters:

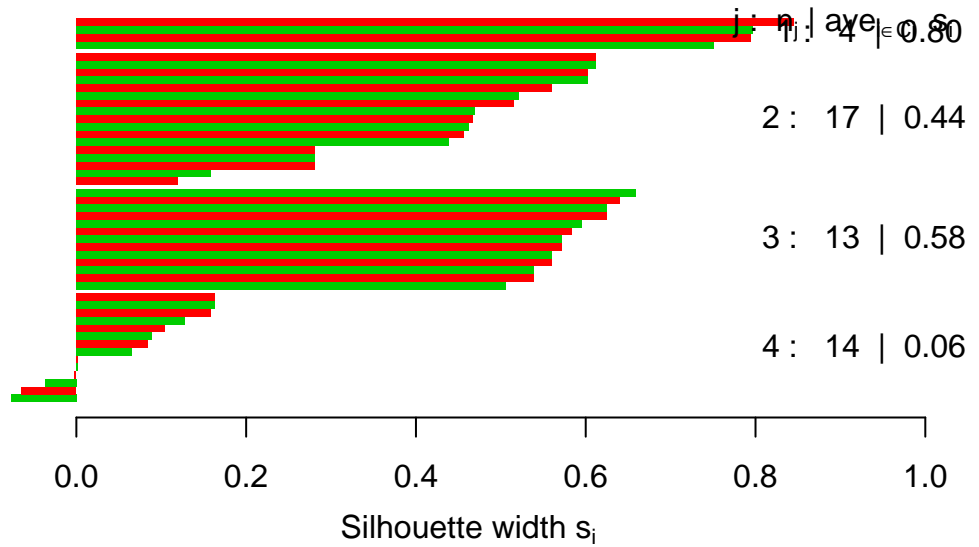
- 2: Connectivity
- 4: The within sums of square elbow of the plot, Dunn index, Average Proportion of Non-Overlap, and Average distance between centers

4.3.1 4 Cluster Solution

Silhouette plot of pam(x = dist_pruned.rules_lhs2_conf5

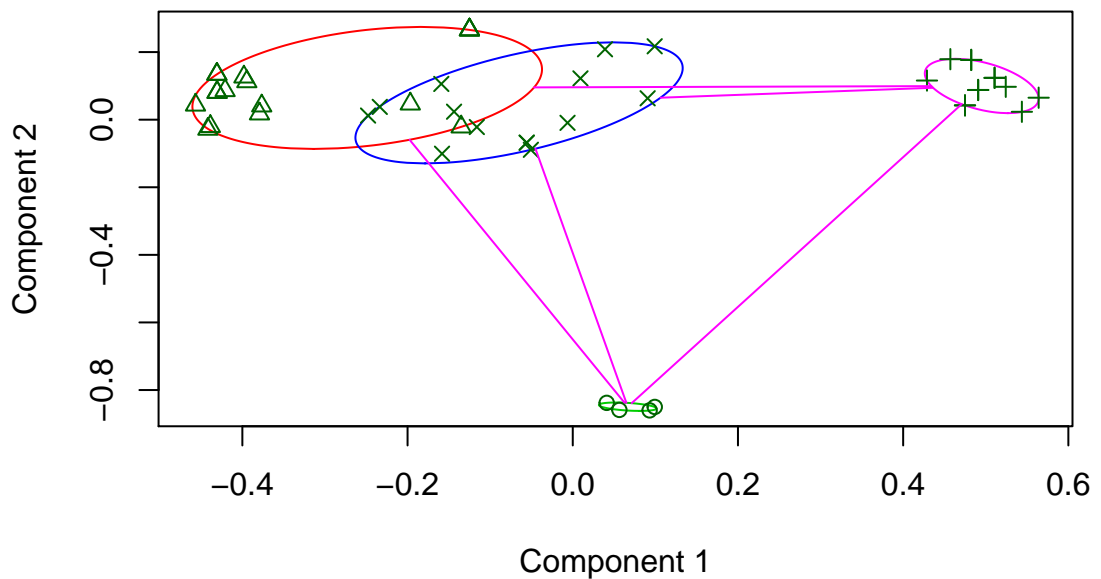
n = 48

4 clusters C_j



Average Silhouette Widths Average silhouette width : 0.4

Cluster plot, k = 2



Cluster Plot

Cluster 1

These two components explain 47.96 % of the point variability.

Table 6: Determinants of LOC-Cluster 1

	gR_EOE	gR_FR	gS_FF	rowtotals
lsPE	1	2	1	4
coltotals	1	2	1	4

Table 7: Determinants of LOC-Cluster 1 Question Frequency

LHS1	Freq.x	Freq.y
cfq26=Disagree	3	NA
cfq28=Disagree	1	NA
cebq19_gRarely	NA	1
cebq27_gRarely	NA	1
cebq33_gSometimes	NA	1
cebq34_gRarely	NA	1

Cluster 2

Table 8: Determinants of LOC-Cluster 2 Question Frequency

	gR_FR	gS_EOE	gS_FF	lsN_PE	lsN_Rest	lsPE	lsS_SR	rowtotals
gR_FR	0	0	0	3	0	0	2	5
gRest	0	0	0	0	1	1	0	2
gS_EF	1	0	2	0	0	0	0	3
gS_FF	0	0	0	1	0	0	0	1
lsConc	0	0	0	0	1	0	0	1
lsPE	3	1	0	0	0	0	1	5
coltotals	4	1	2	4	2	1	3	17

Table 9: Determinants of LOC-Cluster 2 Question Frequency

LHS1	Freq.x	Freq.y
cebq1_gSometimes	2	NA
cebq12_gRarely	1	1
cebq19_gRarely	1	NA
cebq34_gRarely	3	2
cebq5_gSometimes	1	NA
cebq7_gSometimes	1	1
cfq14=Unconcerned	1	NA
cfq20=Agree	2	NA
cfq26=Disagree	4	1
cfq28=Disagree	1	NA
cebq14_gRarely	NA	1
cebq26_lsSometimes	NA	3

Table 9: Determinants of LOC-Cluster 2 Question Frequency (*continued*)

LHS1	Freq.x	Freq.y
cebq27_gSometimes	NA	1
cebq33_gSometimes	NA	1
cfq21_lsNeutralAD	NA	1
cfq23_lsNeutralAD	NA	1
cfq26_lsNeutralAD	NA	1
cfq27_lsNeutralAD	NA	1
cfq28_lsNeutralAD	NA	2

Cluster 3

Table 10: Determinants of LOC-Cluster 3

	gR_EOE	gR_FR	gS_FF	lsN_PE	lsN_Rest	lsPE	lsS_SR	rowtotals
BreastFed_ls7mo	0	0	1	0	0	0	0	1
cAge_7.9yr	0	0	0	0	1	0	0	1
cBMI_OWOB	0	0	0	1	0	1	0	2
gR_FR	0	0	0	0	0	0	1	1
gS_EF	0	1	1	0	0	0	0	2
gS_FF	0	0	0	3	0	0	0	3
lsN_Conc	0	0	0	0	1	0	0	1
lsPE	1	0	0	0	0	0	0	1
lsS_EUE	0	1	0	0	0	0	0	1
coltotals	1	2	2	4	2	1	1	13

Table 11: Determinants of LOC-Cluster 3 Question Frequency

LHS1	Freq.x	Freq.y
BreastFed_ls7mo	1	NA
cAge_7.9yr	1	NA
cBMI_OWOB	2	NA
cebq19_gRarely	1	NA
cebq22_gSometimes	2	NA
cebq25_lsSometimes	1	NA
cebq33_gSometimes	2	2
cebq7_gSometimes	1	NA
cfq14_lsNeutralCon	1	NA
cfq27=Disagree	1	NA
cebq27_gRarely	NA	1
cebq30_lsSometimes	NA	1
cebq34_gRarely	NA	2
cfq23_lsNeutralAD	NA	2
cfq25_lsNeutralAD	NA	1
cfq26_lsNeutralAD	NA	2

Table 11: Determinants of LOC-Cluster 3 Question Frequency (*continued*)

LHS1	Freq.x	Freq.y
cfq26=Disagree	NA	1
cfq28_lsNeutralAD	NA	1

Cluster 4

Table 12: Determinants of LOC-Cluster 4

	gN_Rest	gR_FR	gS_FF	lsN_PE	lsN_Rest	lsPE	lsS_FF	lsS_SR	rowtotals
cAge_7.9yr	0	1	0	0	0	0	0	0	1
gR_FR	1	0	1	0	0	0	0	2	4
gR_SR	0	0	0	0	1	0	0	0	1
gS_EF	0	1	1	0	0	0	1	0	3
gS_EOE	0	0	0	2	0	0	0	0	2
gS_FF	0	1	0	0	0	0	0	0	1
lsS_EOE	0	1	0	0	0	0	0	0	1
mBMI_OBOW	0	0	0	0	0	1	0	0	1
coltotals	1	4	2	2	1	1	1	2	14

Table 13: Determinants of LOC-Cluster 4 Question Frequency

LHS1	Freq.x	Freq.y
cAge_7.9yr	1	NA
cebq1_gSometimes	2	NA
cebq12_gRarely	1	NA
cebq13_lsSometimes	1	NA
cebq14_gRarely	2	1
cebq20_gSometimes	1	NA
cebq21_gRarely	1	NA
cebq27_gSometimes	2	NA
cebq34_gRarely	1	3
cebq7_gSometimes	1	NA
mBMI_OBOW	1	NA
cebq10_gSometimesRev	NA	1
cebq10_lsSometimesRev	NA	1
cebq30_lsSometimes	NA	2
cebq33_gSometimes	NA	1
cfq20_gNeutralAD	NA	1
cfq23_lsNeutralAD	NA	1
cfq26_lsNeutralAD	NA	1
cfq26=Disagree	NA	1
cfq28_lsNeutralAD	NA	1

4.4 Testing Additive Effects

Subset: Contains predictors from step 1 (i.e., CFQ 26 and 28 = 'Disagree' and CEBQ 34 > 'Rarely' - 11 rules)

- 39 rules were identified
- 9 rules had ORs that exceed the single predictor OR

Table 14: Determinants of LOC-Significant Additive

LHS2	LHS1	oddsRatio	OR_lowerCI	OR_upperCI	fisher.p	fisher.padj_holm	Cat1	Cat2
cebq12_gRarely	cfq26=Disagree	5.000	2.166	11.541	0.000	0.005	lsPE	gR_FR
cebq14_gRarely	cfq26=Disagree	6.458	2.834	14.717	0.000	0.000	lsPE	gR_FR
cebq14_gRarely	cebq7_gSometimes	4.920	1.999	12.108	0.001	0.009	gS_FF	gR_FR
cebq19_gRarely	cfq26=Disagree	7.510	3.305	17.066	0.000	0.000	lsPE	gR_FR
cebq26_lsSometimes	cfq26=Disagree	5.578	2.424	12.837	0.000	0.002	lsPE	lsS_SR
cebq26_lsSometimes	cebq12_gRarely	7.651	2.858	20.483	0.000	0.002	gR_FR	lsS_SR
cebq27_gRarely	cfq26=Disagree	6.628	2.954	14.872	0.000	0.000	lsPE	gR_EOE
cebq27_gSometimes	cfq26=Disagree	8.821	3.185	24.436	0.000	0.001	lsPE	gS_EOE
cebq30_lsSometimes	cebq12_gRarely	4.500	1.854	10.925	0.001	0.009	gR_FR	lsS_SR
cebq33_gSometimes	BreastFed_ls7mo	6.193	2.552	15.030	0.000	0.002	BreastFed_ls7mo	gS_FF
cebq33_gSometimes	cebq1_gSometimes	6.921	2.864	16.723	0.000	0.001	gS_EF	gS_FF
cebq33_gSometimes	cfq28=Disagree	12.567	4.095	38.560	0.000	0.000	lsPE	gS_FF
cebq33_gSometimes	cebq14_gRarely	4.920	1.999	12.108	0.001	0.009	gR_FR	gS_FF
cebq33_gSometimes	cebq22_gSometimes	6.013	2.360	15.316	0.000	0.005	gS_EF	gS_FF
cebq34_gRarely	cebq20_gSometimes	4.920	1.999	12.108	0.001	0.009	gS_EF	gR_FR
cebq34_gRarely	cfq26=Disagree	11.104	4.058	30.383	0.000	0.000	lsPE	gR_FR
cebq34_gRarely	cAge_7.9yr	4.500	1.854	10.925	0.001	0.009	cAge_7.9yr	gR_FR
cebq34_gRarely	cebq13_lsSometimes	4.920	1.999	12.108	0.001	0.009	lsS_EOE	gR_FR
cebq34_gRarely	cebq25_lsSometimes	6.013	2.360	15.316	0.000	0.005	lsS_EUE	gR_FR
cebq34_gRarely	cfq28=Disagree	8.598	3.235	22.853	0.000	0.001	lsPE	gR_FR
cebq34_gRarely	cebq5_gSometimes	6.193	2.552	15.030	0.000	0.002	gS_EF	gR_FR
cebq34_gRarely	cebq22_gSometimes	4.818	2.059	11.277	0.000	0.007	gS_EF	gR_FR
cebq7_gSometimes	cebq1_gSometimes	6.818	2.765	16.816	0.000	0.001	gS_EF	gS_FF
cfq20_gNeutralAD	cebq34_gRarely	4.500	1.854	10.925	0.001	0.009	gR_FR	gN_Rest
cfq21_lsNeutralAD	cfq20=Agree	6.757	2.673	17.081	0.000	0.002	gRest	lsN_Rest
cfq23_lsNeutralAD	cebq21_gRarely	6.013	2.360	15.316	0.000	0.005	gR_SR	lsN_Rest
cfq23_lsNeutralAD	cfq14_lsNeutralCon	4.652	1.955	11.071	0.001	0.009	lsN_Conc	lsN_Rest
cfq23_lsNeutralAD	cfq14=Unconcerned	4.920	1.999	12.108	0.001	0.009	lsConc	lsN_Rest
cfq23_lsNeutralAD	cAge_7.9yr	5.057	2.100	12.178	0.000	0.007	cAge_7.9yr	lsN_Rest
cfq26_lsNeutralAD	cebq7_gSometimes	5.057	2.100	12.178	0.000	0.007	gS_FF	lsN_PE
cfq26_lsNeutralAD	cebq33_gSometimes	5.057	2.100	12.178	0.000	0.007	gS_FF	lsN_PE
cfq26_lsNeutralAD	cebq34_gRarely	6.921	2.864	16.723	0.000	0.001	gR_FR	lsN_PE

Table 14: Determinants of LOC-Significant Additive (*continued*)

LHS2	LHS1	oddsRatio	OR_lowerCI	OR_upperCI	fisher.p	fisher.padj_holm	Cat1	Cat2
cfq26=Disagree	cBMI_OWOB	5.529	2.265	13.499	0.000	0.005	cBMI_OWOB	lsPE
cfq26=Disagree	cfq20=Agree	6.330	2.656	15.084	0.000	0.001	gRest	lsPE
cfq26=Disagree	mBMI_OBOW	4.500	1.854	10.925	0.001	0.009	mBMI_OBOW	lsPE
cfq27_lsNeutralAD	cebq34_gRarely	9.913	3.604	27.269	0.000	0.000	gR_FR	lsN_PE
cfq28_lsNeutralAD	cebq33_gSometimes	6.087	2.454	15.101	0.000	0.003	gS_FF	lsN_PE
cfq28_lsNeutralAD	cebq34_gRarely	6.330	2.656	15.084	0.000	0.001	gR_FR	lsN_PE
cfq28_lsNeutralAD	cebq7_gSometimes	6.757	2.673	17.081	0.000	0.002	gS_FF	lsN_PE

CEBQ 12 > Rarely (FR) + CFQ 26 = Dissagree (PE)

Table 15: Determinants of LOC: CEBQ 12 > Rarely (FR) + CFQ 26 = Dissagree (PE))

	Beta	SE	z	P	e ^{beta}	e ^{se}
cebq12_gRarelyTRUE	0.388	0.767	0.506	0.613	1.474	2.153
cfq26_DisagreeTRUE	1.399	0.655	2.136	0.033	4.053	1.925
cebq12_gRarelyTRUE:cfq26_DisagreeTRUE	0.159	0.926	0.172	0.864	1.172	2.524

CEBQ 33 > Sometimes (FF) + Breastfeeding < 7 mo

Table 16: Determinants of LOC: CEBQ 33 > Sometimes (FF) + Breastfeeding < 7 mo

	Beta	SE	z	P	e ^{beta}	e ^{se}
cebq33_gSometimesTRUE	-0.665	0.864	-0.770	0.442	0.514	2.373
BreastFed_ls7moTRUE	-0.427	0.535	-0.797	0.425	0.653	1.707
cebq33_gSometimesTRUE:BreastFed_ls7moTRUE	2.665	1.001	2.661	0.008	14.362	2.722

CEBQ 33 > Sometimes (FF) + CEBQ 1 > Sometimes (EF)

Table 17: Determinants of LOC: CEBQ 33 > Sometimes (FF) + CEBQ 1 > Sometimes (EF)

	Beta	SE	z	P	e ^{beta}	e ^{se}
cebq33_gSometimesTRUE	-1.473	1.129	-1.305	0.192	0.229	3.093
cebq1_gSometimesTRUE	-0.398	0.551	-0.724	0.469	0.671	1.734
cebq33_gSometimesTRUE:cebq1_gSometimesTRUE	3.459	1.229	2.813	0.005	31.776	3.419

CFQ 28 = Disagree (PE) + CEBQ 33 > Sometimes (FF)

Table 18: Determinants of LOC: CFQ 28 = Disagree (PE) + CEBQ 33 > Sometimes (FF)

	Beta	SE	z	P	e ^{beta}	e ^{se}
cebq33_gSometimesTRUE	0.185	0.686	0.269	0.788	1.203	1.986
cfq28_DisagreeTRUE	0.514	0.525	0.980	0.327	1.672	1.690
cebq33_gSometimesTRUE:cfq28_DisagreeTRUE	1.999	0.925	2.162	0.031	7.384	2.521

CEBQ 34 > Rarely (FR) + CFQ 28 = Dissagree (PE)

Table 19: Determinants of LOC: CEBQ 34 > Rarely (FR) + CFQ 28 = Dissagree (PE)

	Beta	SE	z	P	e ^{beta}	e ^{se}
cebq34_gRarelyTRUE	-0.031	0.850	-0.036	0.971	0.970	2.340
cfq28_DisagreeTRUE	0.521	0.492	1.061	0.289	1.684	1.635
cebq34_gRarelyTRUE:cfq28_DisagreeTRUE	1.743	1.014	1.718	0.086	5.715	2.758

CEBQ 7 > Sometimes (FF) + CEBQ 1 > Sometimes (EF)

Table 20: Determinants of LOC: CEBQ 7 > Sometimes (FF) + CEBQ 1 > Sometimes (EF)

	Beta	SE	z	P	\hat{e}^{beta}	\hat{e}^{se}
cebq7_gSometimesTRUE	-0.598	0.899	-0.665	0.506	0.550	2.457
cebq1_gSometimesTRUE	-0.087	0.571	-0.152	0.879	0.917	1.770
cebq7_gSometimesTRUE:cebq1_gSometimesTRUE	2.477	1.023	2.421	0.015	11.901	2.781

CFQ 21 = Agree (Restrict) + CFQ 21 < Neutral (Restrict)

Table 21: Determinants of LOC: CFQ 21 = Agree (Restrict) + CFQ 21 < Neutral (Restrict)

	Beta	SE	z	P	\hat{e}^{beta}	\hat{e}^{se}
LOC_arules\$cfq20_AgreeTRUE	-0.214	0.652	-0.328	0.743	0.807	1.919
cfq21_lsNeutralADTRUE	-0.119	0.542	-0.219	0.827	0.888	1.720
LOC_arules\$cfq20_AgreeTRUE:cfq21_lsNeutralADTRUE	1.981	0.842	2.353	0.019	7.251	2.321

CEBQ 34 > Rarely (FR) + CFQ 27 < Neutral (PE)

Table 22: Determinants of LOC: CEBQ 34 > Rarely (FR) + CFQ 27 < Neutral (PE)

	Beta	SE	z	P	\hat{e}^{beta}	\hat{e}^{se}
cebq34_gRarelyTRUE	-0.811	0.835	-0.971	0.332	0.444	2.306
cfq27_lsNeutralADTRUE	-0.811	0.494	-1.641	0.101	0.444	1.639
cebq34_gRarelyTRUE:cfq27_lsNeutralADTRUE	3.296	1.021	3.229	0.001	27.000	2.775

CEBQ 7 > Sometimes (FF) + CFQ 28 < Neutral (PE)

Table 23: Determinants of LOC: CEBQ 7 > Sometimes (FF) + CFQ 28 < Neutral (PE)

	Beta	SE	z	P	\hat{e}^{beta}	\hat{e}^{se}
cebq7_gSometimesTRUE	1.455	1.206	1.207	0.228	4.286	3.340
cfq28_lsNeutralADTRUE	1.829	1.058	1.729	0.084	6.230	2.880
cebq7_gSometimesTRUE:cfq28_lsNeutralADTRUE	0.048	1.302	0.037	0.971	1.049	3.676

5 Determinants of No LOC-eating

5.1 Step 1: Single Predictor

Confidence = 0.33

Support = 0.19 (25%, n = 30)

Identified 107 rules were identified

- 1 had $\kappa \geq 0.20$
- 34 had added value ≥ 0.05
- the 1 remaining rule was significant

Table 24: Determinants of No LOC-Single Predictors

LHS	count	support	confidence	coverage	lift	oddsRatio	OR_lowerCI	OR_upperCI	fisher.p	fisher.padj_holm
cebq34_lsSometimes	102	0.646	0.829	0.778	1.083	4.09	1.812	9.233	0.001	0.001

5.2 Step 2: Multiple Predictors

Confidence = 0.50

Support = 0.255 (33%, n = 40)

Found 1335 rules were identified

- 16 had $\kappa \geq 0.20$
- 678 had added value ≥ 0.05
- of the remaining 16 rules that met both criteria, all were significant after correction

Table 25: Determinants of No LOC-Multiple Predictors

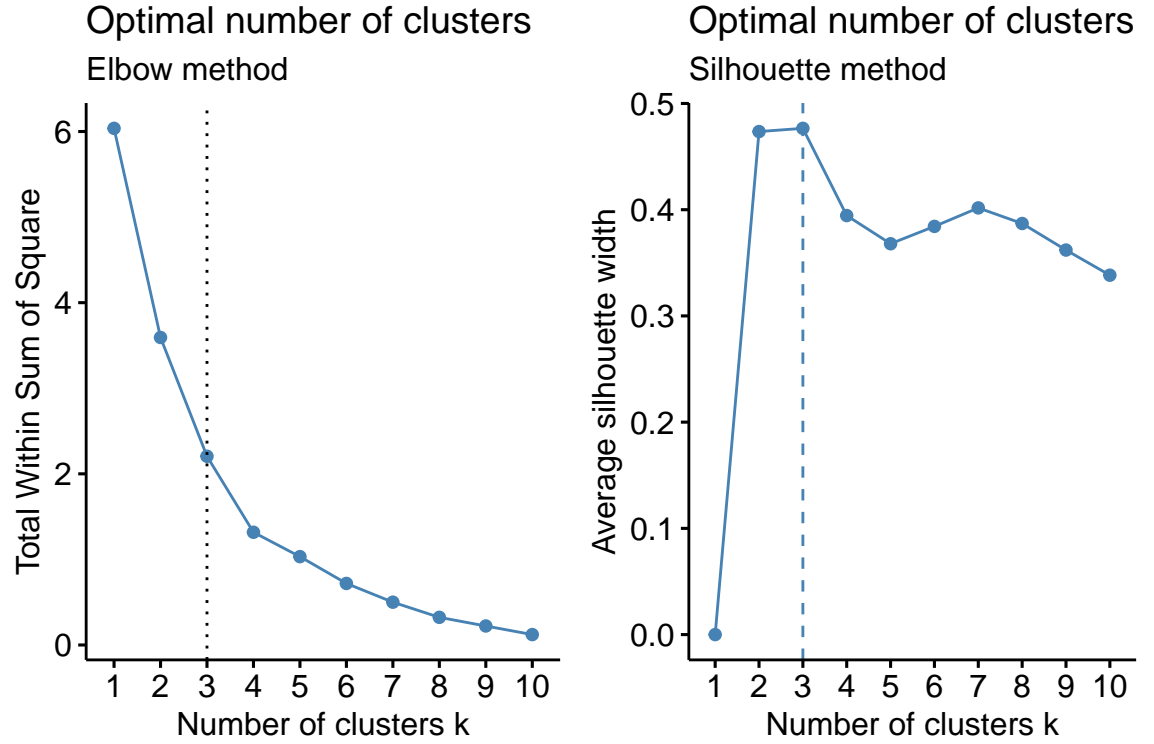
LHS2	LHS1	count	support	confidence	coverage	lift	oddsRatio	OR_lowerCI	OR_upperCI	fisher.p	fisher.p
	cebq34_lsSometimes	102	0.646	0.829	0.778	1.083	4.090	1.812	9.233	0.001	
cebq34_lsSometimes	cAge_8.10yr	73	0.462	0.859	0.538	1.121	3.168	1.454	6.903	0.003	
cebq34_lsSometimes	cBMI=HW	80	0.506	0.851	0.595	1.111	3.206	1.494	6.879	0.002	
cebq34_lsSometimes	cebq13_lsSometimes	92	0.582	0.836	0.696	1.092	3.349	1.554	7.218	0.002	
cebq34_lsSometimes	cebq14_lsSometimes	67	0.424	0.882	0.481	1.151	3.860	1.680	8.872	0.001	
cebq34_lsSometimes	cebq15_lsSometimes	93	0.589	0.830	0.709	1.084	3.147	1.456	6.801	0.003	
cebq34_lsSometimes	cebq1_gRarely	99	0.627	0.832	0.753	1.086	3.825	1.728	8.467	0.001	
cebq34_lsSometimes	cebq21_gRarely	78	0.494	0.848	0.582	1.107	2.980	1.391	6.382	0.004	
cebq34_lsSometimes	cebq8_gRarely	81	0.513	0.862	0.595	1.125	3.738	1.724	8.106	0.001	
cebq34_lsSometimes	cebq31_lsSometimes	70	0.443	0.864	0.513	1.128	3.244	1.469	7.162	0.002	
cebq34_lsSometimes	cebq20_gRarely	93	0.589	0.838	0.703	1.094	3.506	1.622	7.578	0.001	
cebq34_lsSometimes	cebq5_gRarely	97	0.614	0.836	0.734	1.092	3.829	1.748	8.390	0.001	
cebq34_lsSometimes	income_g50K	61	0.386	0.897	0.430	1.171	4.357	1.778	10.680	0.000	
cebq34_lsSometimes	income_g75K	61	0.386	0.897	0.430	1.171	4.357	1.778	10.680	0.000	
cebq34_lsSometimes	mEducation_gHS	80	0.506	0.842	0.601	1.100	2.862	1.343	6.099	0.005	
cfq23_gNeutralAD	cebq26_gRarely	56	0.354	0.918	0.386	1.199	5.514	2.012	15.109	0.000	

Category frequencies for uncorrected rules

Table 26: Determinants of No LOC-Cross Tab Multiple Predictors

	gN_Rest	lsS_FR
cAge_8.10yr	0	1
cBMI=HW	0	1
gR_EF	0	3
gR_SE	0	1
gR_SR	1	1
income_g50K	0	1
income_g75K	0	1
lsS_DD	0	1
lsS_EOE	0	2
lsS_FR	0	1
mEducation_gHS	0	1

5.3 Clustering



Plot of cluster metrics

Cluster Metrics

Table 27: Determinants of No LOC-Cluster Metrics

measure	score_at3	method	clusters
Connectivity	6.2036	pam	2
Dunn	0.8895	pam	3
Silhouette	0.4766	pam	3
APN	0.0871	pam	4
AD	0.298	pam	5
ADM	0.0905	pam	4
FOM	0.081	pam	5

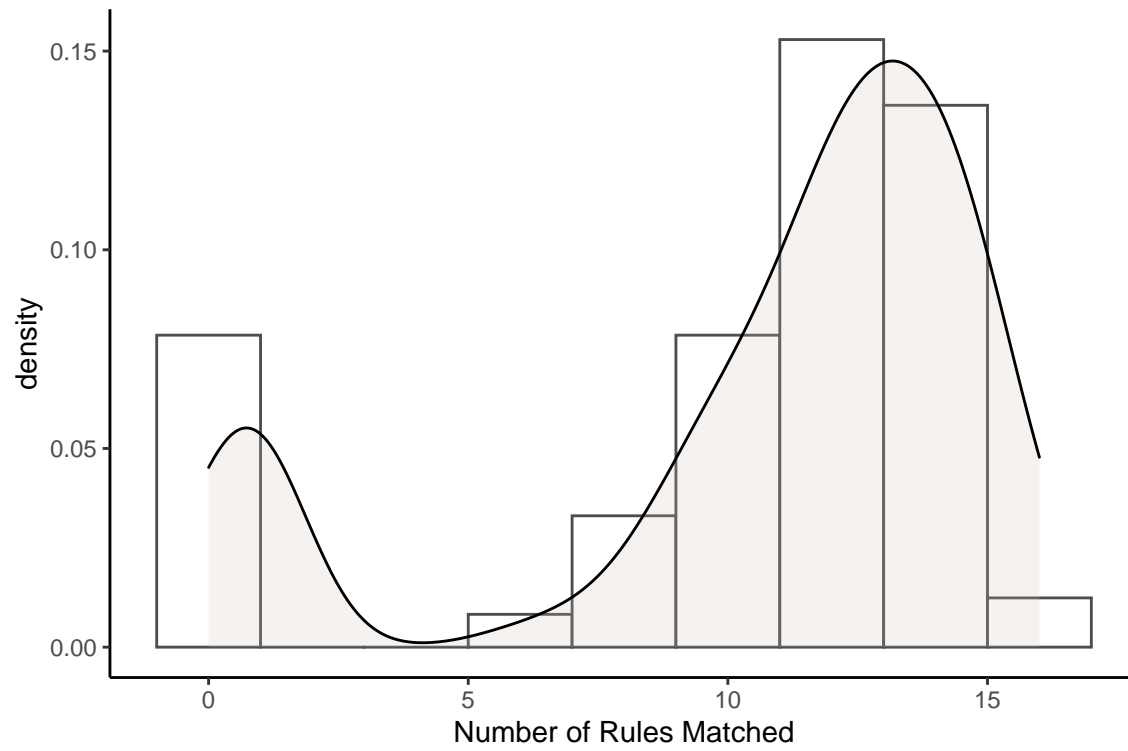
Number of clusters:

- 2: Connectivity
- 3: lower sums of square, Silhouette width, Dunn Index
- 4: APN, ADM (5 is AD and FOM)

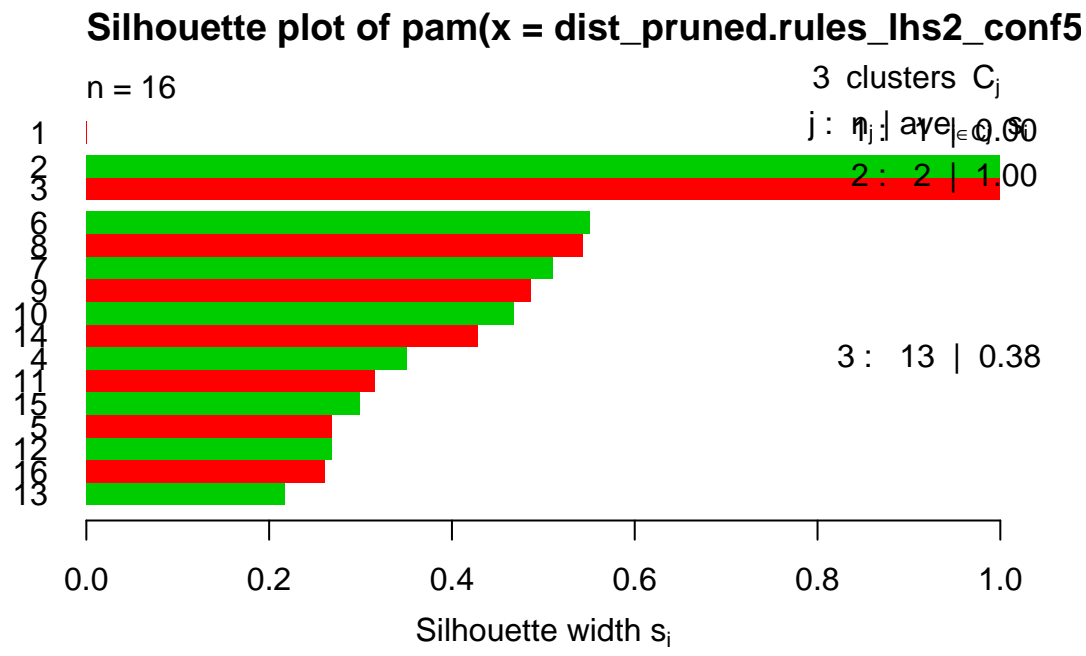
Table 28: Determinants of NO LOC-Clusters

Cluster_gupta3	Freq
1	1
2	2

5.3.1 Endorsement of Rules



5.3.2 3 Cluster Solution



Average Silhouette Widths

Cluster Plot

Cluster 1

Average silhouette width : 0.44

Table 29: Determinants of NO LOC-Cluster 1

	gR_SR	rowtotals
gN_Rest	1	1
coltotals	1	1

Table 30: Determinants of NO LOC-Cluster 1 Question Frequency

LHS1	Freq
cebq26_gRarely	1

Cluster 2

Table 31: Determinants of NO LOC-Cluster 2

	lsS_FR	rowtotals
income_g50K	1	1
income_g75K	1	1
coltotals	2	2

Table 32: Determinants of NO LOC-Cluster 2 Question Frequency

LHS1	Freq
income_g50K	1
income_g75K	1

Cluster 3

Table 33: Determinants of NO LOC-Cluster 3

	lsS_FR	rowtotals
cAge_8.10yr	1	1
cBMI=HW	1	1
gR_EF	3	3
gR_SE	1	1
gR_SR	1	1
lsS_DD	1	1
lsS_EOE	2	2
lsS_FR	1	1
mEducation_gHS	1	1
coltotals	12	12

Table 34: Determinants of NO LOC-Cluster 2 Question Frequency

LHS1	Freq
cAge_8.10yr	1
cBMI=HW	1
cebq1_gRarely	1
cebq13_lsSometimes	1
cebq14_lsSometimes	1
cebq15_lsSometimes	1
cebq20_gRarely	1
cebq21_gRarely	1
cebq31_lsSometimes	1
cebq34_lsSometimes	1
cebq5_gRarely	1
cebq8_gRarely	1
mEducation_gHS	1

5.4 Testing Additive Effects

Subset: Contains predictor from step 1

- 14 rules contained a significant predictor from step 1
- all were significant
- none showed greater OR than single predictor

Table 35: Determinants of No LOC-Additive Effect OR Comparisons

LHS2	LHS1	oddsRatio	OR_lowerCI	OR_upperCI	fisher.p	fisher.padj_holm	Cluster_gupta3	Cat1
cebq34_lsSometimes	cAge_8.10yr	3.168	1.454	6.903	0.003	0.013	3	cAge_8.10yr
cebq34_lsSometimes	cebq1_gRarely	3.825	1.728	8.467	0.001	0.009	3	gR_EF
cebq34_lsSometimes	cebq13_lsSometimes	3.349	1.554	7.218	0.002	0.013	3	lsS_EOE
cebq34_lsSometimes	cebq14_lsSometimes	3.860	1.680	8.872	0.001	0.009	3	lsS_FR
cebq34_lsSometimes	cBMI=HW	3.206	1.494	6.879	0.002	0.013	3	cBMI=HW
cebq34_lsSometimes	cebq20_gRarely	3.506	1.622	7.578	0.001	0.011	3	gR_EF
cebq34_lsSometimes	cebq21_gRarely	2.980	1.391	6.382	0.004	0.013	3	gR_SR
cebq34_lsSometimes	cebq31_lsSometimes	3.244	1.469	7.162	0.002	0.013	3	lsS_DD
cebq34_lsSometimes	cebq15_lsSometimes	3.147	1.456	6.801	0.003	0.013	3	lsS_EOE
cebq34_lsSometimes	cebq5_gRarely	3.829	1.748	8.390	0.001	0.009	3	gR_EF
cebq34_lsSometimes	cebq8_gRarely	3.738	1.724	8.106	0.001	0.008	3	gR_SE
cebq34_lsSometimes	income_g50K	4.357	1.778	10.680	0.000	0.007	2	income_g50K
cebq34_lsSometimes	income_g75K	4.357	1.778	10.680	0.000	0.007	2	income_g75K
cebq34_lsSometimes	mEducation_gHS	2.862	1.343	6.099	0.005	0.013	3	mEducation_gHS

6 Determinants of Absence of LOC in High Risk Sample

- There were 70 with at least 1 High Risk characteristic: cebq34_gRarely, mEducation_HS, cfq23_lsNeutralAD
- no LOC n = 42 (35% of no LOC); LOC n = 28 (76% of LOC)

6.1 Step 1: Single Predictor

- Confidence = 0.33
- Support = 0.14 (25%, n = 10)

137 rules were identified

- 7 had $\phi \geq 0.20$
- 74 had added value ≥ 0.05
- of the remaining 7 rules that met both criteria, none were significant after correction
- of the remaining 7 rules that met both criteria, 6 were significant with no correction

Table 36: Determinants of Absence of LOC in High Risk Sample

LHS	RHS	count	support	confidence	coverage	lift	addVal	kappa	oddsRatio	OR_lowerCI	OR_upperCI	fisher.p
cebq34_lsSometimes	loc1=No	102	0.646	0.829	0.778	1.083	0.063	0.281	4.09	1.812	9.233	0.001

6.2 Step 2: Multiple Predictors

- Confidence = 0.50
- Support = 0.23 (33%, n = 20)

2589 rules were identified

- 296 had $\phi \geq 0.10$
- 1855 had added value ≥ 0.05
- of the remaining 296 rules that met both criteria, 1 was significant after correction
- of the remaining 296 rules that met both criteria, 255 were significant with no correction

Table 37: Determinants of Absence of LOC in High Risk Sample

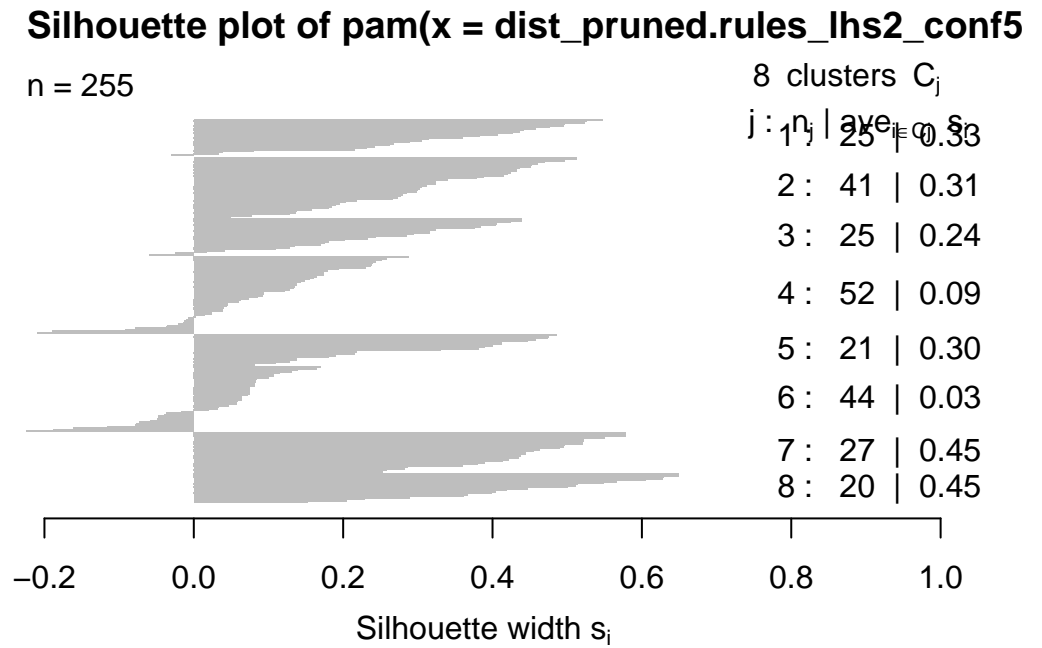
	LHS2	LHS1	RHS	count	support	confidence	coverage	lift	addVal	kappa	oddsRatio	OR_lowerCI	OR_upperCI
147	cebq6_gRarely	cebq7=Sometimes	loc1=No	15	0.214	1	0.214	1.667	0.4	0.308	NA	NaN	NaN

6.3 Clustering

Number of clusters:

- 7: Connectivity, Average Proportion of Non-Overlap, and Average distance between centers
- 10: Dunn, Average Distance, Average Proportion of Non-Overlap, and Average distance between center

6.4 3 Cluster Solution



Average Silhouette Widths

Cluster plot, k = 8

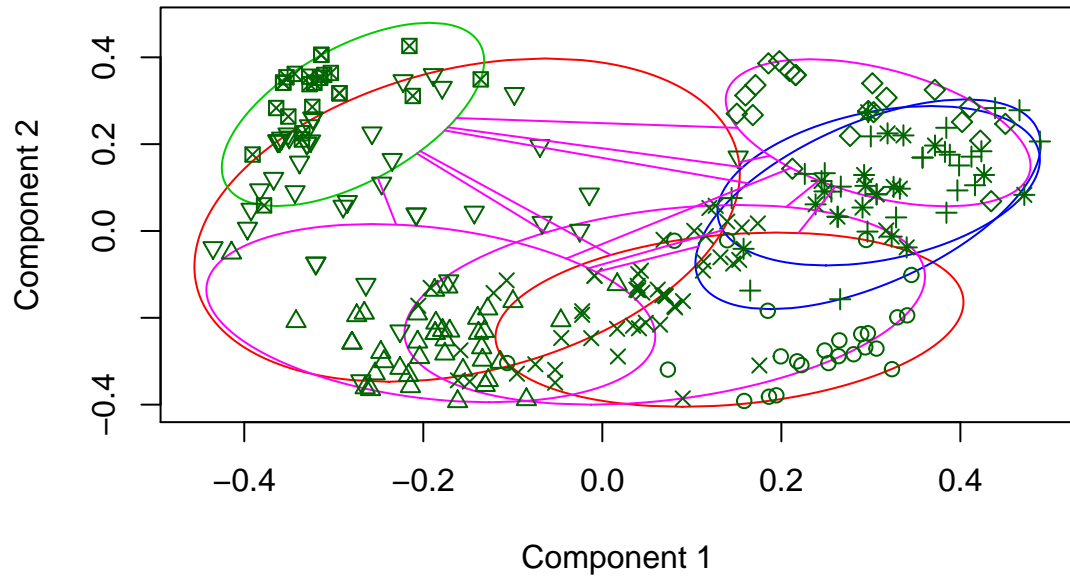


Table 38: Determinants of NO LOC in High Risk Sample-Cluster 1

	BreastFed_ls10mo	gR_EUE	gR_FF	mEducation_gHS	PCW_UW	PPW_UW	sFF	rowtotals
gR_DD	0	0	0	0	0	0	1	1
gR_EUE	0	0	0	0	1	0	2	3
gR_FF	0	0	0	0	0	1	2	3
gR_FR	0	1	0	0	0	0	0	1
gR_SE	0	0	0	0	0	0	1	1
gR_SR	0	0	1	0	0	0	1	2
gS_EF	0	0	0	0	0	0	1	1
gS_PR	0	0	0	0	0	0	1	1
lsS_EOE	0	0	0	0	0	0	2	2
PCW_avg	0	0	0	0	0	0	1	1
PCW_UW	0	0	0	0	0	0	1	1
PPW_UW	0	0	0	0	0	0	3	3
sFF	2	0	0	1	0	0	1	4
coltotals	2	1	1	1	1	1	17	24

Table 39: Determinants of NO LOC in High Risk Sample-Cluster 1 Question Frequency

LHS1	Freq
BreastFed_ls10mo	2
cebq10=Sometimes	4

Table 39: Determinants of NO LOC in High Risk Sample-Cluster 1 Question Frequency (*continued*)

LHS1	Freq
cebq25_gRarely	1
cebq7_gRarely	1
cebq7=Sometimes	14
cfq6=Avg	1
cfq9=Avg	1
mEducation_gHS	1

Cluster 2

Table 40: Determinants of NO LOC in High Risk Sample-Cluster 2

	cBMI=HW	gR_EF	gR_FR	gR_SR	lsEOE	lsS_SE	mEducation_gHS	sFR	sSR	rowtotals
gH_PR	0	0	0	0	0	0	0	0	3	3
gN_Conc	0	0	0	1	0	0	0	0	0	1
gN_Rest	0	0	0	1	0	0	0	0	0	1
gR_DD	0	0	0	2	0	0	0	0	2	4
gR_EF	0	0	0	0	0	0	0	0	2	2
gR_EUE	0	0	0	0	0	0	0	0	1	1
gR_FF	0	0	0	0	0	0	0	0	2	2
gR_FR	0	0	0	1	0	0	0	0	3	4
gR_SR	0	1	1	0	2	1	0	1	1	7
gS_EF	0	0	0	0	0	0	0	0	3	3
gS_PR	0	0	0	1	0	0	0	0	1	2
lsS_EOE	0	0	0	0	0	0	0	0	2	2
lsS_SE	0	0	0	0	0	0	0	0	1	1
PCW_UW	0	0	0	0	0	0	0	0	1	1
PPW_UW	0	0	0	0	0	0	0	0	1	1
sSR	1	0	0	0	3	0	1	0	0	5
coltotals	1	1	1	6	5	1	1	1	23	40

Table 41: Determinants of NO LOC in High Risk Sample-Cluster 2 Question Frequency

LHS1	Freq
cBMI=HW	1
cebq13=Rarely	1
cebq15=Rarely	2
cebq18_lsSometimes	1
cebq19_gRarely	1
cebq2=Rarely	2
cebq20_gRarely	1
cebq26_gRarely	6
cebq26=Sometimes	24

Table 41: Determinants of NO LOC in High Risk Sample-Cluster 2 Question Frequency (*continued*)

LHS1	Freq
cebq34=Sometimes	1
mEducation_gHS	1

Cluster 3

Table 42: Determinants of NO LOC in High Risk Sample-Cluster 3

	BreastFed_ls10mo	cBMI=HW	gEF	lsDD	lsS_FR	PPW_avg	PPW_UW	sFF	sSR	rowtotal
gH_PR	0	0	0	0	0	0	1	0	0	
gN_Rest	0	0	0	0	0	0	1	0	0	
gR_DD	0	0	0	0	0	0	1	0	0	
gR_EF	0	0	0	0	0	0	1	0	0	
gR_FF	0	0	0	0	0	0	1	0	0	
gR_SE	0	0	0	1	0	0	1	0	0	
gR_SR	0	0	0	0	0	0	1	0	0	
gS_EF	0	0	0	0	0	0	1	0	0	
gS_PR	0	0	0	0	0	0	1	0	0	
lsN_PE	0	0	0	0	1	0	1	0	0	
lsS_EOE	0	0	0	0	0	0	1	0	0	
lsS_FR	0	0	0	0	0	1	1	0	0	
PPW_UW	1	2	1	0	0	1	1	2	1	
coltotals	1	2	1	1	1	2	13	2	1	2

Table 43: Determinants of NO LOC in High Risk Sample-Cluster 3 Question Frequency

LHS1	Freq
BreastFed_ls10mo	1
cBMI=HW	2
cebq10=Sometimes	1
cebq17=Sometimes	1
cebq19_lsSometimes	1
cebq20=Often	1
cebq29=Rarely	1
cebq32=Sometimes	1
cfq5=Avg	2
cfq6=Avg	14

Cluster 4

Table 44: Determinants

	BreastFed_ls10mo	BreastFed_ls4mo	cAge_9.10yr	cAge_9.12yr	EatOut_1.4mo	gEF	gH_PR
gH_PR	0	0	1	1	0	0	0
gN_Conc	0	0	0	0	0	0	1
gN_Rest	0	0	0	0	0	0	0
gR_DD	2	1	0	1	0	1	0
gR_EF	1	0	0	0	0	0	0
gR_FR	0	0	0	0	0	0	0
gR_SE	0	0	0	0	0	0	0
gR_SR	0	0	0	0	0	0	0
gS_FR	0	0	0	0	0	0	0
gS_PR	1	0	0	0	0	0	0
lsS_EOE	1	0	0	0	0	0	0
lsS_FF	0	0	1	1	0	0	0
lsS_SE	0	0	0	0	0	1	0
PCW_UW	1	0	0	0	0	0	0
PPW_gOW	0	0	0	0	1	0	0
coltotals	6	1	2	3	1	2	1

Table 45: Determinants of NO LOC in High Risk Sample-Cluster 4 Question Frequency

LHS1	Freq
BreastFed_ls10mo	6
BreastFed_ls4mo	1
cAge_9.10yr	2
cAge_9.12yr	3
cebq1_gSometimes	2
cebq10=Sometimes	1
cebq15=Rarely	3
cebq18_lsSometimes	5
cebq20_gRarely	2
cebq20=Often	2
cebq28_gRarely	1
cebq28_gSometimes	1
cebq31_gRarely	1
cebq6_gRarely	13
cebq6=Sometimes	1
cfq10=Avg	1
cfq2_gHalf	1
cfq5=Avg	1
cfq8=Avg	1
cfq9=Avg	1
EatOut_1.4mo	1
mEducation_gHS	2

Cluster 5

Table 46: Determinants of NO LOC in High Risk Sample-Cluster 5

	cBMI=HW	gEF	gR_EF	gR_FR	gS_EF	lsS_EOE	lsS_FR	PCW_UW	PPW_UW
BreastFed_ls10mo	1	0	0	0	0	0	0	0	0
gEF	2	0	0	0	0	0	0	0	0
lsN_PE	1	0	0	0	0	2	1	0	0
lsN_Rest	0	2	2	1	3	0	0	2	1
lsS_EOE	0	0	0	0	0	0	0	0	1
lsS_FR	0	1	0	0	1	0	0	0	0
coltotals	4	3	2	1	4	2	1	2	2

Table 47: Determinants of NO LOC in High Risk Sample-Cluster 5 Question Frequency

LHS1	Freq
cBMI=HW	4
cebq1_gSometimes	1
cebq20_gRarely	1
cebq20=Often	1
cebq22_gSometimes	1
cebq27_lsSometimes	2
cebq28_gRarely	1
cebq34_lsSometimes	1
cebq5_gRarely	1
cebq5_gSometimes	2
cebq5=Often	2
cfq10=Avg	1
cfq8=Avg	2
cfq9=Avg	1

Cluster 6

Table 48: Determinants of NO LOC in High Risk Sample-Cluster 6

	BreastFed_ls10mo	BreastFed_ls7mo	cAge_9.10yr	cAge_9.12yr	cBMI=HW	gEF	gMon	gR_L
gH_PR	0	0	0	0	0	0	0	0
gN_Rest	0	0	0	0	0	0	0	0
gR_EUE	0	0	0	0	1	0	0	0
gR_Mon	0	0	0	0	0	0	0	0
gR_SR	1	1	1	1	1	1	2	0
gS_FR	0	0	0	0	0	0	0	0
gS_Mon	0	0	0	0	0	0	0	0
gS_PR	0	0	0	0	0	0	1	0
PPW_gOW	0	0	0	0	0	0	0	0
sEUE	1	0	0	0	0	0	0	0

Table 48: Determinants of

	BreastFed_ls10mo	BreastFed_ls7mo	cAge_9.10yr	cAge_9.12yr	cBMI=HW	gEF	gMon	gR_L
coltotals	2	1	1	1	2	1	3	

Table 49: Determinants of NO LOC in High Risk Sample-Cluster 6 Question Frequency

LHS1	Freq
BreastFed_ls10mo	2
BreastFed_ls7mo	1
cAge_9.10yr	1
cAge_9.12yr	1
cBMI=HW	2
cebq11_gRarely	1
cebq11_gSometimes	1
cebq15_lsSometimes	1
cebq18_lsSometimes	1
cebq19_gRarely	1
cebq2_lsSometimes	1
cebq20_gRarely	1
cebq20_gSometimes	1
cebq20=Often	1
cebq23_gRarely	3
cebq26_gRarely	4
cebq28_gSometimes	1
cebq30_gRarely	9
cebq5_gRarely	1
cebq6_gRarely	2
cebq9_gRarely	2
cfq11=Avg	1
cfq29=Mostly	1
cfq30=Mostly	2
cfq5=Avg	1
cfq6=Avg	1

Cluster 7

Table 50: Determinants of NO LOC in High Risk Sample-Cluster 7

	BreastFed_ls10mo	lsEOE	lsFF	sSR	rowtotals
gR_DD	0	0	0	1	1
gR_EF	0	0	0	2	2
gR_FR	0	0	0	1	1
gR_Mon	0	0	0	2	2
gR_SR	0	0	0	1	1

Table 50: Determinants of NO LOC in High Risk Sample-Cluster 7 (*continued*)

	BreastFed_ls10mo	lsEOE	lsFF	sSR	rowtotals
gS_EF	0	0	0	3	3
gS_Mon	0	0	0	2	2
gS_PR	0	0	0	1	1
lsS_EOE	0	0	0	3	3
lsS_FF	0	0	0	1	1
PCW_avg	0	0	0	1	1
PCW_UW	0	0	0	1	1
PPW_avg	0	0	0	1	1
PPW_UW	0	0	0	2	2
sSR	1	1	1	1	4
coltotals	1	1	1	23	26

Table 51: Determinants of NO LOC in High Risk Sample-Cluster 7 Question Frequency

LHS1	Freq
BreastFed_ls10mo	1
cebq2=Rarely	1
cebq24=Rarely	1
cebq26=Sometimes	1
cebq30=Sometimes	23

Cluster 8

Table 52: Determinants of NO LOC in High Risk Sample-Cluster 8

	BreastFed_ls10mo	cBMI=HW	gEF	gR_SE	sSE	rowtotals
gEF	0	0	0	0	1	1
gR_DD	0	0	0	0	1	1
gR_EF	0	0	0	0	1	1
gR_FR	0	0	0	0	1	1
gR_SE	1	0	0	0	0	1
gS_EF	0	0	0	0	1	1
gS_PR	0	0	0	0	1	1
lsN_Conc	0	0	0	0	1	1
lsS_EOE	0	0	0	0	2	2
lsS_SE	0	0	0	1	1	2
PCW_UW	0	0	0	0	1	1
PPW_avg	0	0	0	0	1	1
PPW_UW	0	0	0	0	3	3
sSE	0	1	1	0	0	2
coltotals	1	1	1	1	15	19

Table 53: Determinants of NO LOC in High Risk Sample-Cluster 8 Question Frequency

LHS1	Freq
BreastFed_ls10mo	1
cBMI=HW	1
cebq1=Often	1
cebq8_gRarely	1
cebq8=Sometimes	16