

MCA

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Raport przedstawia wyniki Wielokrotnej Analizy Korespondencji (MCA) na zbiorach porządkowych i nominalnych zmiennych dotyczących aktywności i preferencji kulturalnych oraz statusu socjoekonomicznego. W celu otrzymania w pełni poprawnego rozwiązania zastosowano korektę wartości własnych wymiarów rozwiązana (Greenacre, 2006). Dodatkowo, obok pozycji kategorii odpowiedzi w przestrzeni rozwiązania obliczono również współrzędne respondentów. Posłużono się do tego tzw. wzorem przejścia (Rouanet, 2006; Greenacre, 2006).

Wczytanie niezbędnych pakietów i funkcji oraz zbioru danych:

```
library(lattice)
library(psych)
library(ca)
library(knitr)
source("../DataReduction/MCAhelper.R")
source("../HelperFunctionsMisc/ComputingMisc.R")
load("../MainData/MainData7.RData")
D.back = D
```

MCA dla zmiennych związanych z aktywnością i preferencjami kulturalnymi

Przygotowanie danych:

```
vars = names(D.back)[c(5, 9:11, 20:30, 35:37)]
D = D.back[, vars]
```

MCA:

```
cc.mca = mjca(D, nd=NA, lambda="adjusted")
summary(cc.mca)
```

```
##
## Principal inertias (eigenvalues):
##
## dim    value      %   cum%   scree plot
## 1      0.021246  52.5  52.5  *****
## 2      0.003925   9.7  62.2  *****
## 3      0.002050   5.1  67.2  **
## 4      0.001617   4.0  71.2  **
## 5      0.000874   2.2  73.4  *
## 6      0.000506   1.2  74.7  *
## 7      0.000311   0.8  75.4
## 8      0.000262   0.6  76.1
## 9      0.000191   0.5  76.5
## 10     0.000127   0.3  76.9
## 11     5.1e-050   0.1  77.0
```

12 7e-06000 0.0 77.0

Total: 0.040477

##

##

Columns:

##		name	mass	qlt	inr	k=1	cor	ctr	k=2	cor	ctr	
## 1		edu:<=highschool+tech		25	107	15	-20	27	0	34	80	7
## 2		edu:BA		17	142	18	7	3	0	-50	139	11
## 3		edu:MA+		13	23	21	29	23	1	-1	0	0
## 4		fatheredu:<=med		25	767	21	-173	601	35	-91	166	53
## 5		fatheredu:high		31	767	17	142	601	29	74	166	43
## 6		motheredu:<=med		17	804	25	-235	710	45	-85	94	32
## 7		motheredu:high		38	804	11	106	710	20	39	94	15
## 8		grandedu:don't_know		9	538	22	-164	538	11	-5	1	0
## 9		grandedu:<=med		24	463	17	-49	101	3	-94	363	54
## 10		grandedu:high		23	677	19	117	386	15	102	292	60
## 11		moviefreq:rarely		10	634	21	-159	592	11	43	43	4
## 12		moviefreq:sometimes		26	167	14	36	117	2	24	50	4
## 13		moviefreq:often		20	180	17	29	42	1	-53	138	14
## 14		bookfreq:rarely		10	762	24	-243	703	29	-71	59	13
## 15		bookfreq:sometimes		13	108	20	29	32	1	-45	75	7
## 16		bookfreq:often		32	480	12	66	346	7	41	135	14
## 17		pressfreq:rarely		16	571	22	-169	556	22	28	15	3
## 18		pressfreq:sometimes		15	53	18	-1	0	0	28	53	3
## 19		pressfreq:often		25	530	17	113	483	15	-35	47	8
## 20		musicfreq:not_everyday		12	655	24	-187	471	19	117	185	41
## 21		musicfreq:everyday		44	655	6	50	471	5	-32	185	11
## 22		theater:regularly		28	796	20	179	733	43	-53	63	20
## 23		theater:rarely		27	796	20	-184	733	44	54	63	20
## 24		opera:never		22	838	22	-221	838	51	5	0	0
## 25		opera:rarely		28	515	14	93	506	11	12	8	1
## 26		opera:regularly		5	684	31	430	659	46	-84	25	9
## 27		cinema:sometimes		36	636	12	-98	591	17	27	45	7
## 28		cinema:regularly		19	636	22	185	591	31	-51	45	13
## 29		art:rarely		20	818	25	-250	797	59	41	21	8
## 30		art:sometimes		28	492	15	98	489	13	7	3	0
## 31		art:regularly		8	576	29	294	480	31	-132	96	34
## 32		livemusic:rarely		23	749	19	-151	578	25	82	170	40
## 33		livemusic:sometimes		28	480	14	68	294	6	-54	186	21
## 34		livemusic:regularly		5	484	29	333	457	25	-82	27	8
## 35		club:never		11	652	27	-221	441	26	152	210	67
## 36		club:rarely		13	135	20	-61	129	2	-13	6	1
## 37		club:sometimes		18	161	18	52	135	2	-23	26	2
## 38		club:regularly		13	524	24	184	426	21	-88	98	26
## 39		sportshow:never		20	744	25	-229	662	48	80	82	32
## 40		sportshow:rarely		19	399	17	72	265	5	-51	134	13
## 41		sportshow:regularly		17	692	22	188	668	28	-36	24	5
## 42		bookquant:tens		19	755	25	-211	560	39	-125	195	73
## 43		bookquant:hundreds		31	602	13	75	399	8	54	203	23
## 44		bookquant:thousands		6	550	26	261	471	19	107	79	17
## 45		cdquant:few		15	686	26	-239	648	41	-58	38	13
## 46		cdquant:tens		20	199	17	-8	3	0	-65	196	22
## 47		cdquant:hundreds		20	715	23	187	534	33	109	180	61

## 48	artquant:zero	10	502	25	-210	493	20	-29	9	2
## 49	artquant:few	33	308	11	-30	117	1	-39	192	13
## 50	artquant:tens+	13	671	27	243	529	35	126	143	51
##										
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Inspekcja wartości korelacji pokazuje, że właściwie we wszystkich przypadkach dominuje pierwszy wymiar. Wymiar drugi jest wyraźnie resztowy. Dodatkowo interpretacja będzie wsparta graficznym przedstawieniem rozwiązania.

A scatter plot showing the relationship between two dimensions, Wymiar I (horizontal axis) and Wymiar II (vertical axis). The plot displays numerous vectors originating from the center (0,0), representing different cultural activities. The vectors are labeled with activity names and frequency/quantity indicators. The axes range from -0.3 to 0.3. The plot is divided into four quadrants by dashed lines at Wymiar I = 0 and Wymiar II = 0.

Activities and their approximate positions (Wymiar I, Wymiar II):

- Top-Right Quadrant (Positive Wymiar I, Positive Wymiar II):**
 - art:quant: tens+
 - book:quant: thousands
 - cd:quant: hundred
 - father:edu: high
 - grand:edu: high
 - book:quant: hundreds
 - book:freq: often
 - edu: high
 - opera: rarely
 - art: sometimes
 - club: sometimes
 - music: freq: everyday
 - press: freq: often
 - sport: show: regularly
 - theat: rarely
 - liv: music: reg
 - art: regularly
 - club: regularly
 - theat: regularly
 - mother: edu: <= med
 - father: edu: <= med
 - grand: edu: <= med
 - art: quant: few
 - book: freq: sometimes
 - cd: quant: tens
 - mother: freq: rarely
 - book: quant: tens
 - art: rarely
 - club: rarely
 - cinema: sometimes
 - edu: <= high school + tech
 - press: freq: sometimes
 - movie: freq: sometimes
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
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 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
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 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
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 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
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 - edu: <= high school + tech
 - press: freq: rarely
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 - edu: <= high school + tech
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 - art: quant: zero
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 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
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 - club: never
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 - sport: show: never
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 - book: freq: rarely
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 - book: quant: rarely
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 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
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 - cinema: rarely
 - edu: <= high school + tech
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 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
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 - book: freq: rarely
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 - book: quant: rarely
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 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
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 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
 - movie: freq: rarely
 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book: quant: rarely
 - art: rarely
 - club: never
 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
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 - club: rarely
 - art: quant: zero
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 - music: freq: not everyday
 - sport: show: never
 - liv: music: rarely
 - theat: rarely
 - movie: freq: rarely
 - press: freq: rarely
 - cinema: rarely
 - edu: <= high school + tech
 - press: freq: rarely
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 - edu: MA+
 - club: rarely
 - art: quant: zero
 - cd: quant: few
 - book: freq: rarely
 - mother: freq: rarely
 - book:

4

Jak widać pierwszy wymiar zdecydowanie można interpretować jako klasycznie rozumiany ogólny kapitał kulturowy, który łączy zarówno stopień uczestnictwa w kulturze oraz poziom jej rozumienia jak i zmaterializowany kapitał kulturowy. Interpretacja drugiego wymiaru jest trudniejsza i tak naprawdę ma mały sens. Ewidentnie jest to wymiar resztowy (i wszystkie pozostałe też), co oznacza, że zasadnicza informacja zawarta w analizowanym zbiorze zmiennych jest jednowymiarowa. Wszystkie pozostałe wymiary, wydaje się, są raczej niczym więcej jak tylko dopasowywaniem danych do przypadkowego szumu. W związku z tym tylko pierwszy wymiar zostanie wyekstrahowany do dalszych analiz. Należy również zwrócić uwagę, że kierunek wymiaru jest odwrócony, tj. współrzędne ujemne odpowiadają wysokiemu kapitałowi kulturowemu.

Obliczenie współrzędnych respondentów (funkcja własna ‘projectInd’ zawarta w: “MCAhelper.R”):

```
cc.ind.coord = projectInd(D, cc.mca)
D.back$cultcap = cc.ind.coord[,1]
```

Tak skonstruowaną miarę kapitału należy uznać za raczej rzetelną. Przypomnijmy, że pierwszy wymiar rozwiązania (czyli właśnie kapitał kulturowy zachowuje aż 57,7% wariancji 44 kategorii odpowiedzi dla 231 respondentów, co jest wynikiem dosyć imponującym).

Trafność teoretyczna zostanie sprawdzona przez sprawdzenie korelacji kapitału kulturowego z miarami preferencji kulturalnych:

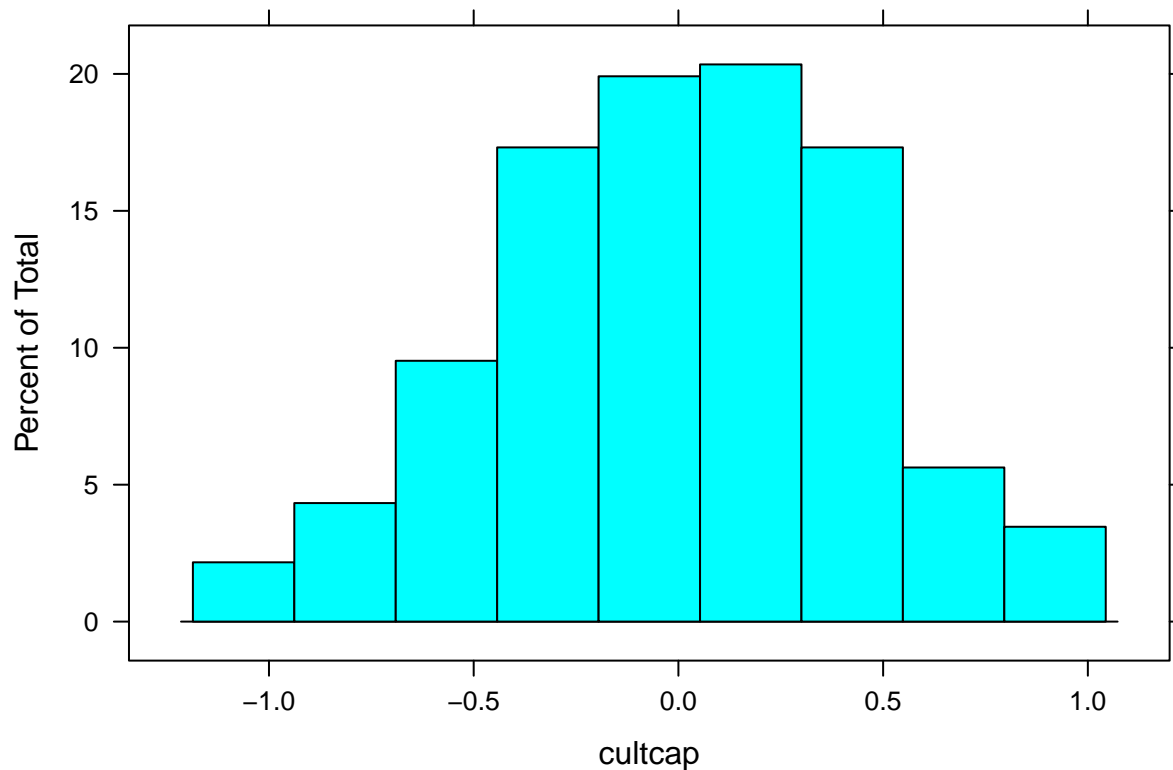
```
##          tvinfo tvlowbrow tvhighbrow tvpop tvcons mvsepic mvshigh mvslg bkshg bkslw
## tvinfo      1.00
## tvlowbrow   0.12  1.00
## tvhighbrow  0.13  0.18  1.00
## tvpop       0.42  0.39  0.13  1.00
## tvcons      0.09  0.22  0.21 -0.03  1.00
## moviesepic -0.05  0.03  0.38  0.07  0.14  1.00
## movieshigh  0.40  0.22  0.16  0.36  0.13  0.12  1.00
## movieslight 0.10  0.00  0.20 -0.14  0.34  0.08  0.11  1.00
## bookshigh   -0.22  0.06  0.24  0.02  0.11  0.60 -0.01  0.00  1.00
## bookslow    0.33  0.14  0.24  0.24  0.12  0.14  0.47  0.08  0.08  1.00
## booksknow   -0.09  0.24  0.30 -0.04  0.13  0.21  0.01  0.12  0.11  0.03
## booksfant   -0.10 -0.03  0.05 -0.16  0.23  0.08 -0.04  0.62  0.05  0.03
## pressgen     0.28  0.42  0.26  0.39  0.11  0.32  0.24  0.00  0.31  0.33
## pressknow   -0.28 -0.05  0.17 -0.13  0.02  0.27 -0.25  0.09  0.24 -0.20
## presscons    0.16  0.23  0.04  0.06  0.43  0.07  0.17  0.09  0.01  0.29
## presslib     0.15  0.24  0.09  0.45 -0.17  0.21  0.12 -0.15  0.23  0.16
## pressspec    0.14  0.05  0.02  0.29  0.13  0.20  0.10 -0.05  0.08  0.21
## musichigh   -0.26  0.03  0.24 -0.15  0.09  0.47 -0.07  0.08  0.51  0.05
## musicmodern  0.19  0.01 -0.07 -0.09  0.18 -0.04  0.05  0.17 -0.08  0.01
## musicrock   -0.11 -0.04  0.00 -0.21  0.15  0.16 -0.05  0.27  0.00  0.00
## musicafro    0.11  0.18  0.01  0.14  0.16 -0.10  0.25 -0.07 -0.14  0.13
## cultcap     -0.11  0.05  0.09 -0.02  0.07  0.36  0.00  0.11  0.46  0.07
##          bkskn bksfn prssg prssk prssc prssl prsss mschg mscmd mscrc
## booksknow    1.00
## booksfant     0.02  1.00
## pressgen      0.24 -0.16  1.00
## pressknow     0.24  0.10  0.06  1.00
## presscons     0.00  0.05  0.27 -0.08  1.00
## presslib      0.07 -0.22  0.50  0.01  0.10  1.00
## pressspec     0.13  0.02  0.22  0.28  0.20  0.30  1.00
## musichigh     0.27  0.06  0.24  0.34 -0.02  0.16  0.14  1.00
## musicmodern   0.03  0.01  0.08 -0.17 -0.04 -0.04 -0.01  0.05  1.00
```

```
## musicrock    0.10  0.41 -0.10  0.09 -0.04 -0.13 -0.03  0.12 -0.02  1.00
## musicafro    0.07 -0.15  0.15 -0.16  0.18  0.03  0.03  0.02  0.07 -0.03
## cultcap      0.14  0.03  0.22  0.20 -0.15  0.21  0.04  0.43  0.17  0.04
##             mscfr cltcp
## musicafro    1.00
## cultcap      -0.04  1.00
```

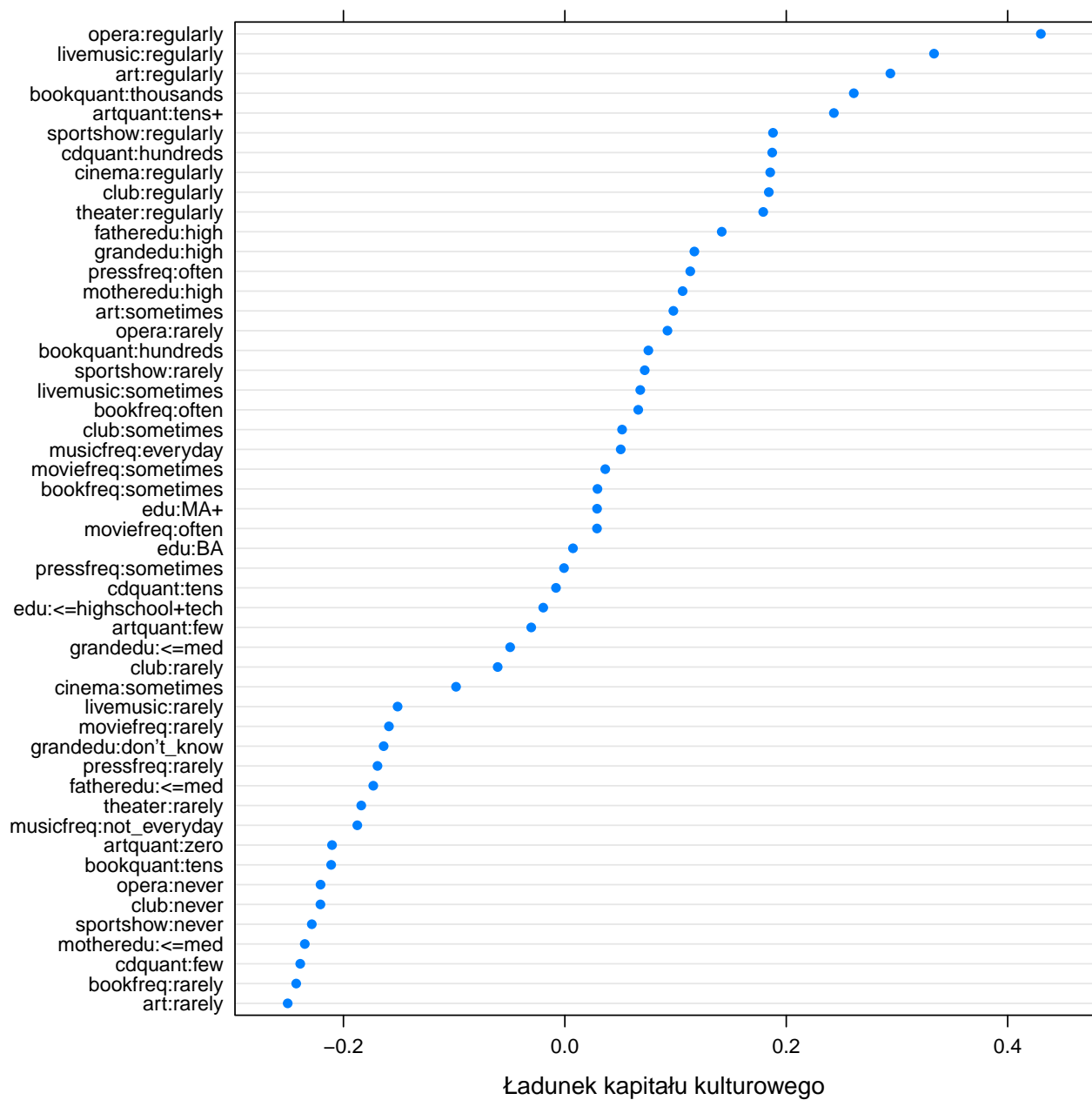
Stosunkowo wysokie korelacje ($r \geq 0,40$) z bookshigh i musichigh zdają się potwierdzać teoretyczną trafność obliczonej skali. Dla większej czytelności poniżej przedstawiono macierz korelacji tylko z tymi dwiema zmiennymi:

```
##             bkshg mschg cltcp
## bookshigh    1.00
## musichigh    0.51  1.00
## cultcap      0.46  0.43  1.00
```

Zauważmy, że rozkład kapitału kulturowego jest względnie symetryczny, co jest dobrym znakiem:



Jako że kapitał kulturowy tworzy tylko jeden wymiar, to możliwe jest liniowe uporządkowanie poszczególnych kategorii odpowiedzi pod względem ich znaczenia dla kapitału kulturowego:



MCA dla zmiennych związanych ze statusem socjoekonomicznym i demografią

Przygotowanie zmiennych:

```
D = D.back
vars = names(D.back)[c(2,6:8,14:18,39:40)]
D = D.back[, vars]
```

MCA:

```
sed.mca = mjca(D, nd=NA, lambda="adjusted")
summary(sed.mca)
```

```

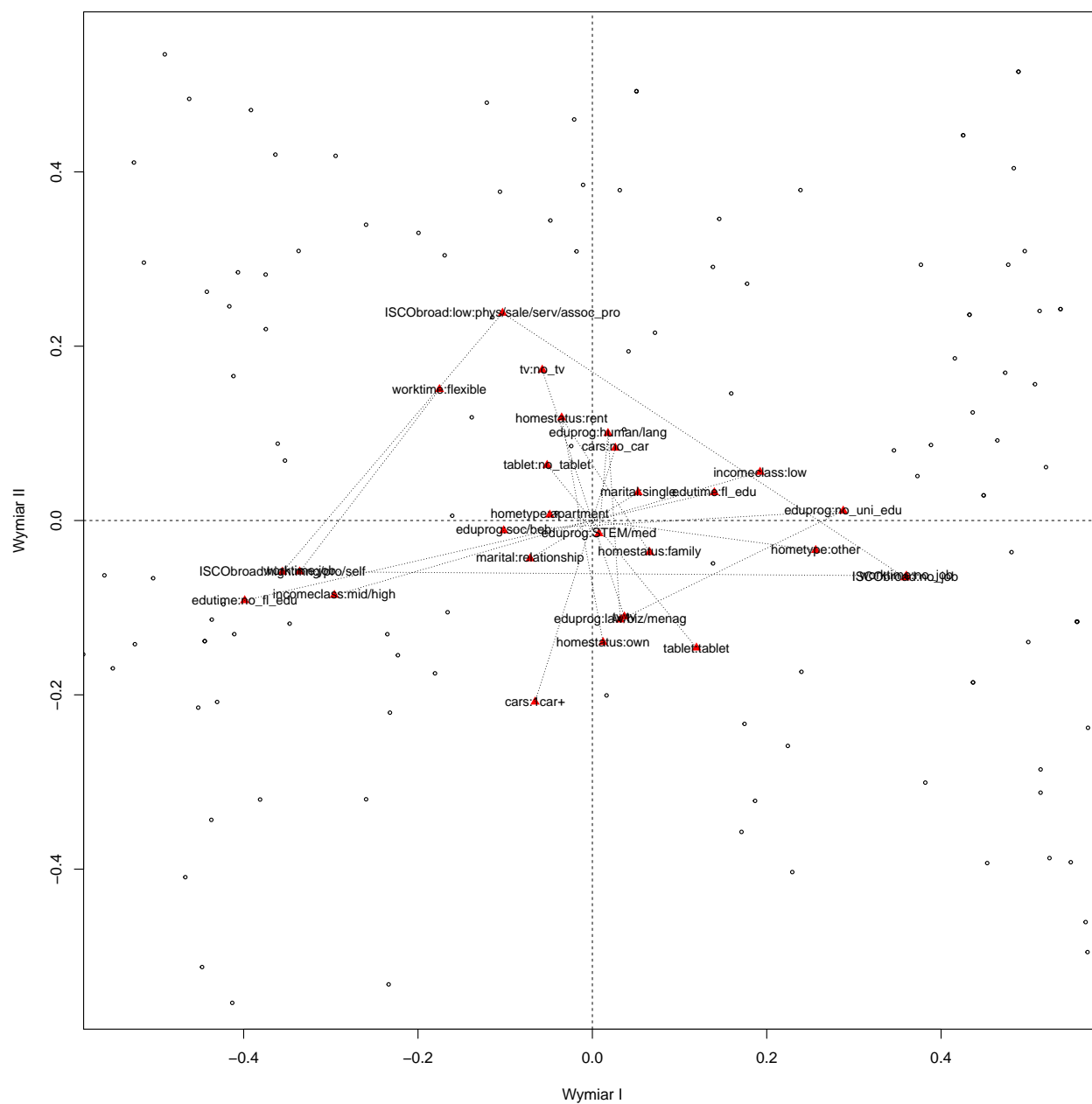
##
## Principal inertias (eigenvalues):
##
## dim      value      %   cum%   scree plot
## 1         0.031527  53.8  53.8  *****
## 2         0.008930  15.2  69.1  *****
## 3         0.001611   2.8  71.8   *
## 4         0.000808   1.4  73.2
## 5         0.000530   0.9  74.1
## 6         0.000258   0.4  74.6
##      -----
## Total: 0.058572
##
##
## Columns:
##
##              name      mass  qlt  inr      k=1 cor
## 1 |              marital:single |    52 465  20 |    53 338
## 2 |              marital:relationship |    39 465  27 |   -71 338
## 3 |              eduprog:soc/beh |    24 400  34 |  -102 395
## 4 |              eduprog:no_uni_edu |     4 573  44 |   288 573
## 5 |              eduprog:law/biz/menag |    18 337  38 |    32  25
## 6 |              eduprog:human/lang |    26 389  34 |    18  12
## 7 |              eduprog:STEM/med |    18  12  36 |     8   2
## 8 |              edutime:no_fl_edu |    24 832  54 |  -399 790
## 9 |              edutime:fl_edu |    67 832  19 |   140 790
## 10 |              worktime:no_job |    38 693  59 |   360 672
## 11 |              worktime:job |    27 732  50 |  -336 710
## 12 |              worktime:flexible |    26 554  42 |  -175 319
## 13 |              cars:no_car |    65 780  15 |    26  71
## 14 |              cars:1car+ |    26 780  38 |   -66  71
## 15 |              hometype:other |    15 815  41 |   256 801
## 16 |              hometype:apartment |    76 815   8 |   -49 801
## 17 |              homestatus:family |    17 129  38 |    66  99
## 18 |              homestatus:rent |    43 495  29 |   -35  41
## 19 |              homestatus:own |    31 539  33 |    12   4
## 20 |              tv:no_tv |    35 638  35 |   -57  64
## 21 |              tv:tv |    55 638  22 |    37  64
## 22 |              tablet:no_tablet |    63 786  15 |   -52 315
## 23 |              tablet:tablet |    28 786  36 |   119 315
## 24 |              ISCObread:no_job |    39 692  59 |   359 670
## 25 | ISCObread:low:phys/sale/serv/assoc_pro |    19 543  45 |  -103  86
## 26 |              ISCObread:high:mng/pro/self |    33 764  54 |  -355 744
## 27 |              incomeclass:low |    55 820  29 |   192 756
## 28 |              incomeclass:mid/high |    36 820  45 |  -296 756
##
##      ctr      k=2 cor  ctr
## 1      5 |    32 127   6 |
## 2      6 |   -44 127   8 |
## 3      8 |   -11   5   0 |
## 4     11 |    11   1   0 |
## 5      1 |  -114 312  27 |
## 6      0 |   100 377  29 |
## 7      0 |   -15   9   0 |
## 8    119 |   -92  42  22 |
## 9     42 |    32  42   8 |

```


## 10	156		-63	21	17	
## 11	96		-59	22	10	
## 12	26		151	235	67	
## 13	1		83	709	50	
## 14	4		-208	709	126	
## 15	30		-34	14	2	
## 16	6		7	14	0	
## 17	2		-36	30	3	
## 18	2		118	455	66	
## 19	0		-140	535	69	
## 20	4		173	574	118	
## 21	2		-110	574	76	
## 22	5		63	471	29	
## 23	12		-146	471	66	
## 24	157		-65	22	19	
## 25	6		238	458	120	
## 26	134		-59	20	13	
## 27	65		56	63	19	
## 28	99		-86	63	29	

Jak widać rozwiązanie jest dobrej jakości - pierwsze dwa wymiary tłumaczą aż 69,1% wariancji, z czego pierwszy zachowuje 53,8%. Większość kategorii odpowiedzi jest dobrze reprodukowana na płaszczyźnie dwuwymiarowej (wysokie wskaźniki jakości - q_lt). Analiza korelacji kategorii z wymiarami pokazuje, że pierwszy wymiar dotyczy przede wszystkim sytuacji życiowej w kategoriach ogólnej stabilizacji. Wysokie wartości odpowiadają ukończeniu studiów, stałej pracy i dobrej ogólnej sytuacji finansowej. Drugi wymiar odpowiada bardziej specyficznym zagadnieniom związanym ze stanem posiadania takich rzeczy jak: mieszkanie, samochód czy różne gadżety (np. tablet). W tym przypadku wydaje się zasadnym zachowanie drugiego wymiaru do dalszych analiz.

Dodatkowy wgląd w sens otrzymanego rozwiązania dostarcza jego graficzna prezentacja:



NULL

Należy zwrócić uwagę, że i w tym przypadku wymiary są odwrócone - wysokie dodatnie współrzędne odpowiadają niskiej stabilizacji i małemu posiadaniu.

Zapisanie współrzędnych respondentów:

```
sed.ind.coord = projectInd(D, sed.mca)
D.back$lifestab = sed.ind.coord[,1] * (-1)
D.back$wealth = sed.ind.coord[,2] * (-1)
```

Brak wyraźnych korelacji z preferencjami kulturowymi i kapitałem kulturowym wskazuje na satysfakcjonującą trafność teoretyczną obu skal:

##	civic	resmb	scnt	attgn	attgv	attds	attnt	tvinf	tvlowb	tvhigh
##	civic	1.00								
##	resmb	0.02	1.00							
##	soccont	0.10	0.43	1.00						
##	attgen	0.11	0.26	0.25	1.00					
##	attgiven	0.03	0.02	0.11	0.57	1.00				
##	attdiscovered	0.16	0.29	0.29	0.61	0.30	1.00			
##	attnoatt	-0.05	0.02	-0.02	-0.39	-0.57	-0.09	1.00		
##	tvinfo	-0.08	0.05	-0.12	0.00	0.08	-0.09	-0.03	1.00	
##	tvlowbrow	0.01	0.03	-0.11	0.06	0.08	0.14	-0.07	0.12	1.00
##	tvhighbrow	0.08	0.07	-0.02	0.09	-0.08	0.11	0.00	0.13	0.18
##	tvpop	0.01	0.13	-0.01	0.09	0.04	0.09	0.01	0.42	0.39
##	tvcons	0.22	-0.05	-0.11	-0.07	0.10	-0.01	-0.04	0.09	0.22
##	moviesep	0.16	0.01	0.09	0.01	-0.09	0.09	-0.07	-0.05	0.03
##	movieshigh	0.02	0.09	-0.01	-0.10	0.01	0.01	0.01	0.40	0.22
##	movieslight	0.19	-0.07	-0.02	-0.08	-0.02	-0.10	0.03	0.10	0.00
##	bookshigh	0.17	0.18	0.11	0.07	-0.04	0.25	-0.10	-0.22	0.06
##	bookslow	-0.06	0.14	-0.05	0.02	0.06	0.04	-0.06	0.33	0.14
##	booksknow	0.15	-0.03	0.16	0.09	-0.12	0.17	-0.04	-0.09	0.24
##	booksfant	0.11	-0.08	-0.12	-0.08	-0.07	-0.12	0.07	-0.10	-0.03
##	pressgen	0.08	0.17	0.00	0.13	0.05	0.19	-0.13	0.28	0.42
##	pressknow	0.07	-0.01	0.18	0.06	-0.11	0.06	0.12	-0.28	-0.05
##	presscons	-0.01	-0.01	-0.16	-0.09	0.15	-0.07	-0.14	0.16	0.23
##	presslib	0.05	0.12	0.05	0.17	0.08	0.18	-0.10	0.15	0.24
##	pressspec	0.03	0.08	0.15	0.02	0.03	0.03	0.13	0.14	0.05
##	musichigh	0.20	0.10	0.20	0.01	-0.05	0.24	0.03	-0.26	0.03
##	musicmodern	0.05	0.03	0.07	0.10	0.09	0.10	-0.04	0.19	0.01
##	microck	0.11	-0.18	-0.06	0.00	0.03	-0.05	-0.04	-0.11	-0.04
##	musicafro	0.03	0.04	0.02	-0.07	0.07	-0.06	0.00	0.11	0.18
##	cultcap	0.31	0.28	0.41	0.22	0.06	0.34	-0.03	-0.11	0.05
##	lifestab	0.15	0.31	0.32	0.16	0.06	0.23	0.05	-0.06	0.04
##	wealth	-0.04	0.03	0.11	0.13	0.09	0.07	0.02	0.15	0.02
##	tvpop	tvcons	mvspc	mvshg	mvslg	bkshg	bkslw	bkskn	bksfn	prssg
##	tvpop	1.00								
##	tvcons	-0.03	1.00							
##	moviesep	0.07	0.14	1.00						
##	movieshigh	0.36	0.13	0.12	1.00					
##	movieslight	-0.14	0.34	0.08	0.11	1.00				
##	bookshigh	0.02	0.11	0.60	-0.01	0.00	1.00			
##	bookslow	0.24	0.12	0.14	0.47	0.08	0.08	1.00		
##	booksknow	-0.04	0.13	0.21	0.01	0.12	0.11	0.03	1.00	
##	booksfant	-0.16	0.23	0.08	-0.04	0.62	0.05	0.03	0.02	1.00
##	pressgen	0.39	0.11	0.32	0.24	0.00	0.31	0.33	0.24	-0.16
##	pressknow	-0.13	0.02	0.27	-0.25	0.09	0.24	-0.20	0.24	0.10
##	presscons	0.06	0.43	0.07	0.17	0.09	0.01	0.29	0.00	0.05
##	presslib	0.45	-0.17	0.21	0.12	-0.15	0.23	0.16	0.07	-0.22
##	pressspec	0.29	0.13	0.20	0.10	-0.05	0.08	0.21	0.13	0.02
##	musichigh	-0.15	0.09	0.47	-0.07	0.08	0.51	0.05	0.27	0.06
##	musicmodern	-0.09	0.18	-0.04	0.05	0.17	-0.08	0.01	0.03	0.01
##	microck	-0.21	0.15	0.16	-0.05	0.27	0.00	0.00	0.10	0.41
##	musicafro	0.14	0.16	-0.10	0.25	-0.07	-0.14	0.13	0.07	-0.15
##	cultcap	-0.02	0.07	0.36	0.00	0.11	0.46	0.07	0.14	0.03
##	lifestab	0.01	0.03	-0.04	-0.05	-0.01	0.00	-0.08	0.14	-0.07
##	wealth	0.12	-0.12	-0.07	0.02	-0.08	-0.11	0.06	-0.03	-0.07

```
##          prssk prssc prssl prsss mschg mscmd mscrc mscfr cltcp lfstb
## pressknow      1.00
## presscons    -0.08  1.00
## presslib       0.01  0.10  1.00
## pressspec     0.28  0.20  0.30  1.00
## musichigh     0.34 -0.02  0.16  0.14  1.00
## musicmodern  -0.17 -0.04 -0.04 -0.01  0.05  1.00
## musicrock     0.09 -0.04 -0.13 -0.03  0.12 -0.02  1.00
## musicafro    -0.16  0.18  0.03  0.03  0.02  0.07 -0.03  1.00
## cultcap       0.20 -0.15  0.21  0.04  0.43  0.17  0.04 -0.04  1.00
## lifestab      0.14 -0.11  0.02  0.03  0.05  0.02  0.01  0.01  0.17  1.00
## wealth       -0.12 -0.06 -0.04  0.00 -0.17  0.07 -0.07  0.00  0.12  0.00
## [1] 1.00
```

Rozkłady skal:

