```
 DATASET CLOSE DataSet2.
GET
  FILE='/Users/keithmccormick/Desktop/Resources/Ready For Cluster With Categor
ical Variables.sav'.
DATASET NAME DataSet3 WINDOW=FRONT.
AUTORECODE VARIABLES=PHOTO GoldStar_Customer GENDER HOMEOWNR
  /INTO photo_num goldstar_num gender_num homeownr_num
  /PRINT.
PHOTO into photo_num
Old Value  New Value  Value Label

U                  1  U
Y                  2  Y


GoldStar_Customer into goldstar_num
Old Value  New Value  Value Label

F                  1  F
T                  2  T


GENDER into gender_num
Old Value  New Value  Value Label

F                  1  F
J                  2  J
M                  3  M
U                  4  U


HOMEOWNR into homeownr_num
Old Value  New Value  Value Label

H                  1  H
U                  2  U


FREQUENCIES VARIABLES=NUMCHLD
  /ORDER=ANALYSIS.
```

Frequencies

Notes

Output Created		15-MAR-2018 13:15...
Comments		
Input	Data	/Users/keithmccormick/Desktop/Resources/Ready For Cluster With Categorical Variables.sav
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	2716
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=NUMCHLD /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

[DataSet3] /Users/keithmccormick/Desktop/Resources/Ready For Cluster With Categorical Variables.sav

Statistics

NUMCHLD

N	Valid	2716
	Missing	0

NUMCHLD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	2270	83.6	83.6	83.6
	1.0	265	9.8	9.8	93.3
	2.0	124	4.6	4.6	97.9
	3.0	42	1.5	1.5	99.4
	4.0	12	.4	.4	99.9
	5.0	3	.1	.1	100.0
	Total	2716	100.0	100.0	

```
 RECODE NUMCHLD (0=1) (1 thru 2=2) (3 thru Highest=3) INTO Numchild_bin.
EXECUTE.
MULTIPLE CORRES VARIABLES=KMeans photo_num goldstar_num gender_num homeownr_nu
m Numchild_bin
  /ANALYSIS=KMeans(WEIGHT=1) photo_num(WEIGHT=1) goldstar_num(WEIGHT=1) gender
_num(WEIGHT=1)
    homeownr_num(WEIGHT=1) Numchild_bin(WEIGHT=1)
  /MISSING=KMeans(PASSIVE,MODEIMPU) photo_num(PASSIVE,MODEIMPU) goldstar_num(P
ASSIVE,MODEIMPU)
    gender_num(PASSIVE,MODEIMPU) homeownr_num(PASSIVE,MODEIMPU) Numchild_bin(P
ASSIVE,MODEIMPU)
  /DIMENSION=2
  /NORMALIZATION=VPRINCIPAL
  /MAXITER=100
  /CRITITER=.00001
  /PRINT=CORR DISCRIM
  /PLOT=OBJECT(20) JOINTCAT(KMeans photo_num goldstar_num gender_num homeownr_
num Numchild_bin)
    (20) DISCRIM (20).
```

Multiple Correspondence

Notes

Output Created		**15-MAR-2018 13:18...**
Comments		
Input	**Data**	**/Users/keithmccormick/Desktop/Resources/Ready For Cluster With Categorical Variables.sav**
	Active Dataset	**DataSet3**
	Filter	**<none>**
	Weight	**<none>**
	Split File	**<none>**
	N of Rows in Working Data File	**2716**

Notes

Syntax		MULTIPLE CORRES VARIABLES=KMeans photo_num goldstar_num gender_num homeownr_num Numchild_bin /ANALYSIS=KMeans (WEIGHT=1) photo_num (WEIGHT=1) goldstar_num (WEIGHT=1) gender_num (WEIGHT=1) homeownr_num (WEIGHT=1) Numchild_bin (WEIGHT=1) /MISSING=KMeans (PASSIVE,MODEIMPU) photo_num(PASSIVE, MODEIMPU) goldstar_num(PASSIVE, MODEIMPU) gender_num(PASSIVE, MODEIMPU) homeownr_num (PASSIVE,MODEIMPU) Numchild_bin(PASSIVE, MODEIMPU) /DIMENSION=2 /NORMALIZATION=VPRINCIPAL /MAXITER=100 /CRITITER=.00001 /PRINT=CORR DISCRIM /PLOT=OBJECT(20) JOINTCAT(KMeans photo_num goldstar_num gender_num homeownr_num Numchild_bin) (20) DISCRIM (20).
Resources	**Processor Time**	00:00:00.63
	Elapsed Time	00:00:00.00

Credit

Multiple Correspondence
Version 1.0
by
Leiden SPSS Group
Leiden University
The Netherlands

Case Processing Summary

Valid Active Cases	2716
Active Cases with Missing Values	0
Supplementary Cases	0
Total	2716
Cases Used in Analysis	2716

Iteration History

	Variance Accounted For		
Iteration Number	Total	Increase	Loss
65[a]	1.217953	.000009	4.782047

a. The iteration process stopped because the convergence test value was reached.

Model Summary

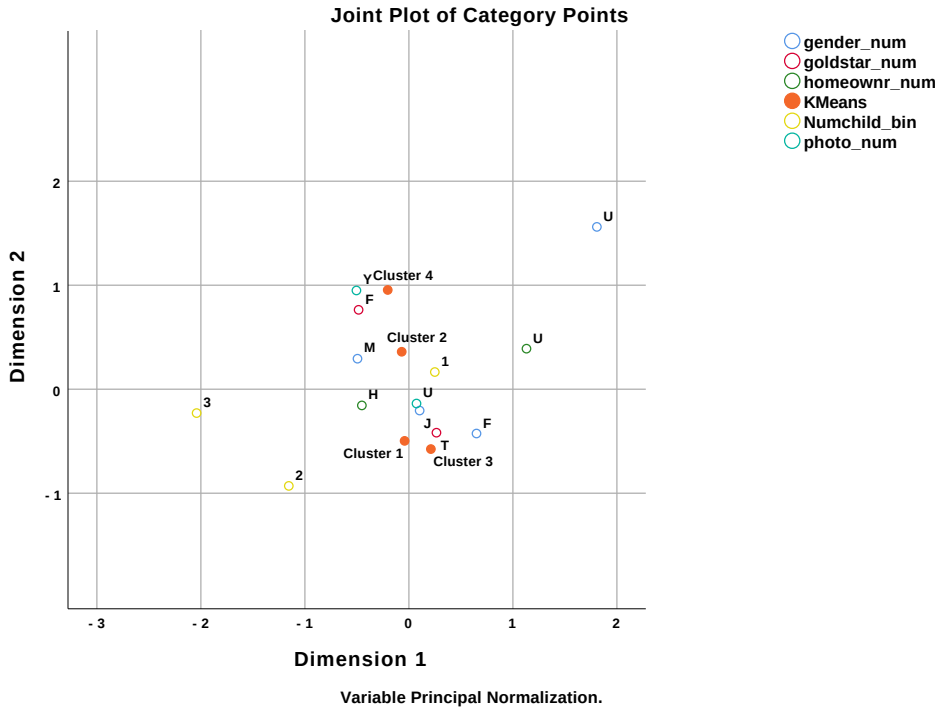
		Variance Accounted For		
Dimension	Cronbach's Alpha	Total (Eigenvalue)	Inertia	% of Variance
1	.258	1.273	.212	21.222
2	.168	1.163	.194	19.376
Total		2.436	.406	
Mean	.215[a]	1.218	.203	20.299

a. Mean Cronbach's Alpha is based on the mean Eigenvalue.

Quantifications

Plot

Category Points



Correlations Transformed Variables

Dimension: 1

	KMeans	photo_num	goldstar_num	gender_num	homeownr_num
KMeans	1.000	.008	.138	.000	-.003
photo_num	.008	1.000	.031	.027	.050
goldstar_num	.138	.031	1.000	.063	.050
gender_num	.000	.027	.063	1.000	.116
homeownr_num	-.003	.050	.050	.116	1.000
Numchild_bin	-.012	-.015	.007	.043	.193
Dimension	1	2	3	4	5
Eigenvalue	1.273	1.136	1.007	.952	.848

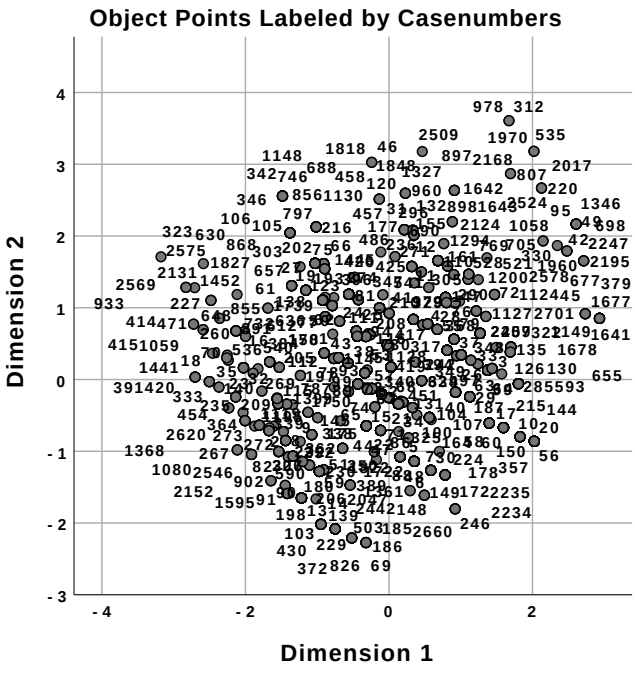
Correlations Transformed Variables

Dimension: 1

	Numchild_bin
KMeans	-.012
photo_num	-.015
goldstar_num	.007
gender_num	.043
homeownr_num	.193
Numchild_bin	1.000
Dimension	6
Eigenvalue	.784

Objects

Object Points Labeled by

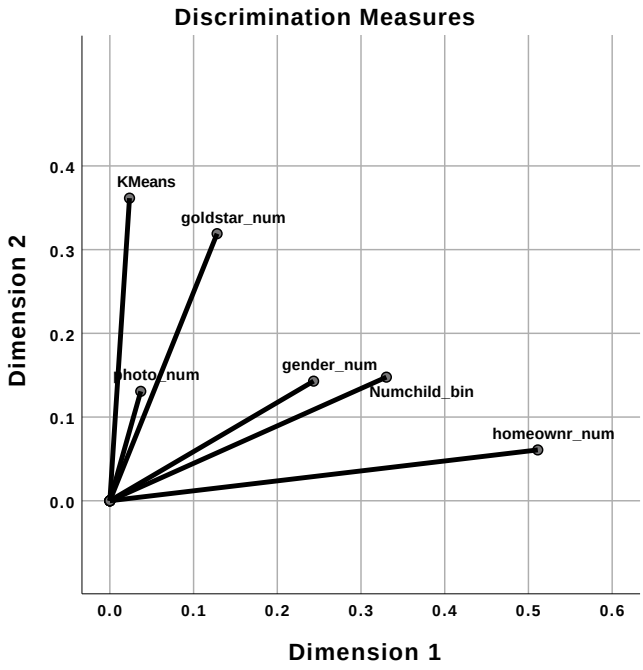


Variable Principal Normalization.

Discrimination Measures

Discrimination Measures

	Dimension		
	1	2	Mean
KMeans	.023	.362	.192
photo_num	.037	.131	.084
goldstar_num	.128	.319	.224
gender_num	.243	.143	.193
homeownr_num	.511	.061	.286
Numchild_bin	.330	.148	.239
Active Total	1.273	1.163	1.218
% of Variance	21.222	19.376	20.299



Variable Principal Normalization.