Package 'faisalconjoint'

February 22, 2012

Type Package
Title Faisal Conjoint Model: A New Approach to Conjoint Analysis
Version 1.0
Date 2012-02-17
Author Faisal Afzal Siddiqui, Ghulam Hussain, and Mudassiruddin
Maintainer Faisal Afzal Siddiqui
Description It is used for systematic analysis of decisions based on attributes and its levels.
License GPL-3
LazyLoad yes
R topics documented:
faisalconjoint-package
candies_data
candies_levels
carpet_data
carpet_levels
cleanser_data
cleanser_levels
traditional_data
traditional_levels
Index 10

faisalconjoint-package

FCM: A New Approach of Conjoint Analysis

Description

Faisal Conjoint Model (FCM) is a conjoint model, developed by Faisal Afzal Siddiqui, Ghulam Hussain, and Mudassiruddin in 2011. Its algorithm was written in R statistical language. It is independent from any design. It could be used for any research design, i.e., randomization, replication, blocking, orthogonal, factorial, fuzzy, etc. Another important point about FCM is rank procedure. It works for every kind of ranks i.e. unique ranks, percentage ranks, tight ranks, missing ranks etc.

Details

Package: faisalconjoint Type: Package Version: 1.0 Date: 2012-02-08

License: What license is it under?

LazyLoad: yes

It has been tested with many published data (SPSS 19, SAS 9.3, Baheri et al., 2011, Orme 2010, Hair et al. 2009, Chan 2005, Green and Wind 1973, Green and Wind 1975, SAS Technical Report 1993, http://www.marketingengineering.com, www.sawtoothsoftware.com,). Most of time the results are same with same magnitudes, and some time the rank of results are in same order with different magnitudes.

Author(s)

Faisal Afzal Siddiqui, Ghulam Hussain, Mudassiruddin

References

SPSS 19 SAS 9.3 Baheri et al., 2011 Orme 2010 Hair et al. 2009 Chan 2005 Green and Wind 1973 Green and Wind 1975 SAS Technical Report 1993 http://www.marketingengineering.com www.sawtoothsoftware.com

Examples

```
# Example 1: SAS Teclmical Report R-109, Conjoint Analysis Examples
library(faisalconjoint)
data(candies_data)
data(candies_levels)
faisalconjoint(candies_data,candies_levels)
# Example 2: Hair et al. 2009, Multivariate Data Analysis, 5/ed, Prenhall
library(faisalconjoint)
data(cleanser_data)
data(cleanser_levels)
```

candies_data 3

```
faisalconjoint(cleanser_data, cleanser_levels)

# Example 3: SPSS 19 Conjoint (2011)
library(faisalconjoint)
data(carpet_data)
data(carpet_levels)
faisalconjoint(carpet_data, carpet_levels)

# Example 4: Orme, B. (2010) Getting Started with Conjoint Analysis
library(faisalconjoint)
data(traditional_data)
data(traditional_levels)
faisalconjoint(traditional_data, traditional_levels)
```

candies_data

Chocolate Candy

Description

Metric Conjoint Analysis Example

Usage

data(candies_data)

Format

A data frame with 8 observations on the following 5 variables.

Profile Profile no

Chco Chocolate Type, two levels: Dark, Milk

Center Center, two levels: Hard, Soft Nuts Nuts, two levels: Nuts, No nuts

Ranks Rank by respondents, Greatest to Least

Details

SAS Technical Report R-109 was created and written by Warren F. Kuhfeld. Development and support of the TRANSREJG procedure is the responsibility of Warren F. Kuhfeld. available at: http://support.sas.com/documentation/onlinedoc/v82/techreport_r109.pdf

Source

SAS

References

SAS Technical Report R-1 09

Examples

library(faisalconjoint)
data(candies_data)
candies_data

4 carpet_data

candies_levels

Chocolate Candy Levels

Description

Levels of all chocolate candy's attributes

Usage

```
data(candies_levels)
```

Format

A data frame with 6 observations on the following variable.

```
2 + 2 + 2 = 6 Dark, Hard, Milk, No Nuts, Nuts
```

Details

SAS Technical Report R-109 was created and written by Warren F. Kuhfeld. Development and support of the TRANSREJG procedure is the responsibility of Warren F. Kuhfeld. available at: http://support.sas.com/documentation/onlinedoc/v82/techreport_r109.pdf

Source

SAS

References

SAS Technical Report R-1 09

Examples

library(faisalconjoint)
data(candies_levels)
candies_levels

carpet_data

Carpet Data

Description

Carper research design (orthogonal design)

Usage

```
data(carpet_data)
```

carpet_levels 5

Format

A data frame with 16 observations on the following 7 variables.

Profile Profile no

Package package design has three levels; A, B, C

Brand brand name has three levels; K2R, Glory, Bissell

Price has three levels; \$1.19, \$1.39, \$1.59

Seal Good Housekeeping seal has two levels, No, Yes

Money money-back guarante has two levels; No, Yes

Ranks Rank by respondents, Greatest to Least

Details

http://www.unileon.es/ficheros/servicios/informatica/spss/english/IBM-SPSS_conjoint.pdf

Source

SPSS 19

References

Green, P. E. and Y. Wind (1973), Multi-Attribute Decisions in Marketing. New York: Holt, Rinehart & Winston

Examples

```
library(faisalconjoint)
data(carpet_data)
carpet_data
```

carpet_levels

Carpet Levels

Description

Levels of all carpet's attributes

Usage

```
data(carpet_levels)
```

Format

A data frame with 13 observations on the following variable.

$$3 + 3 + 3 + 2 + 2 = 13$$

A, B, C, K2R, Glory, Bissell, \$1.19, \$1.39, \$1.59, No, Yes, No, Yes

Details

http://www.unileon.es/ficheros/servicios/informatica/spss/english/IBM-SPSS_conjoint.pdf

6 cleanser_data

Source

SPSS 19

References

Green, P. E. and Y. Wind (1973), Multi-Attribute Decisions in Marketing. New York: Holt, Rinehart & Winston

Examples

library(faisalconjoint)
data(carpet_levels)
carpet_levels

cleanser_data

Cleanser Example

Description

Hypothetical product with three attributes

Usage

```
data(cleanser_data)
```

Format

A data frame with 8 observations on the following 5 variables.

Profile Profile no

Form Form of cleanser, two levels: Liquid, Powder

Ingredients Core Ingredients, two levels: Phosphate-fee, Phosphate-based

Brand Brand name, two levels: HBAT, Generic Band

Rank Bank by respondents, Greatest to Least

Details

Hair et al. 2009, Multivariate Data Analysis, 7/ed, Prenhal

Source

Hair et al. 2009, Multivariate Data Analysis, 7/ed, Prenhal

References

Hair et al. 2009, Multivariate Data Analysis, 7/ed, Prenhal

Examples

library(faisalconjoint)
data(cleanser_data)
cleanser_data

cleanser_levels 7

cleanser_levels

Cleanser Levels

Description

Levels of all chocolate cleanser's attributes

Usage

```
data(cleanser_levels)
```

Format

A data frame with 6 observations on the following variable.

```
2 + 2 + 2 = 6 Liquid, Powder, Phosphate-free, Phosphate-base, HATCO, Generic
```

Details

Hair et al. 2009, Multivariate Data Analysis, 7/ed, Prenhal

Source

Hair et al. 2009, Multivariate Data Analysis, 7/ed, Prenhal

References

Hair et al. 2009, Multivariate Data Analysis, 7/ed, Prenhal

Examples

```
library(faisalconjoint)
data(cleanser_levels)
cleanser_levels
```

traditional_data

Traditional Conjoint Analysis

Description

Traditional Conjoint Analysis with Excel

Usage

```
data(traditional_data)
```

8 traditional_levels

Format

A data frame with 18 observations on the following 5 variables.

Profile Profile no

Brand Brand name, three levels: A, B, C

Color Color, two level: Red, Blue

Price Price, three levels: \$50, \$100, \$150

Ranks Rank by respondents, Greatest to Least

Details

http://www.sawtoothsoftware.com/download/techpap/caexcel.pdf

Source

Orme, B. (2010) Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research. Second Edition, Madison, Wis.: Research Publishers LLC.

References

Orme, B. (2010) Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research. Second Edition, Madison, Wis.: Research Publishers LLC.

Examples

library(faisalconjoint)
data(traditional_data)
traditional_data

traditional_levels

Traditional Conjoint Analysis

Description

Traditional Conjoint Analysis with Excel

Usage

```
data(traditional_levels)
```

Format

A data frame with 8 observations on the following variable.

```
A,B,C, Red, Blue, 50, 100, 150
```

Details

http://www.sawtoothsoftware.com/download/techpap/caexcel.pdf

traditional_levels 9

Source

Orme, B. (2010) Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research. Second Edition, Madison, Wis.: Research Publishers LLC.

References

Orme, B. (2010) Getting Started with Conjoint Analysis: Strategies for Product Design and Pricing Research. Second Edition, Madison, Wis.: Research Publishers LLC.

Examples

library(faisalconjoint)
data(traditional_levels)
traditional_levels

Index

```
*Topic conjoint
faisalconjoint-package, 2
*Topic datasets
traditional_levels, 8

candies_data, 3
candies_levels, 4
carpet_data, 4
carpet_levels, 5
cleanser_data, 6
cleanser_levels, 7

faisalconjoint
(faisalconjoint-package), 2
faisalconjoint-package, 2

traditional_data, 7
traditional_levels, 8
```