

Package ‘qsort’

October 26, 2018

Type Package

Title Scoring Q-Sort Data

Version 0.2.3

Description Computes scores from Q-sort data, using criteria sorts and derived scales from subsets of items.

The 'qsort' package includes descriptions and scoring procedures

for four different Q-sets commonly used in developmental psychology research:

Attachment Q-set (version 3.0) (Waters, 1995, <[doi:10.1111/j.1540-5834.1995.tb00214.x](https://doi.org/10.1111/j.1540-5834.1995.tb00214.x)>);

California Child Q-set (Block and Block, 1969, <[doi:10.1037/0012-1649.21.3.508](https://doi.org/10.1037/0012-1649.21.3.508)>);

Maternal Behaviour Q-set (version 3.1)

(Pederson et al., 1999, <<https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1000&context=psychologypub>>);

Preschool Q-set (Baumrind, 1968 revised by Wanda Bronson, <[doi:10.1111/j.1540-5834.1995.tb00214.x](https://doi.org/10.1111/j.1540-5834.1995.tb00214.x)>).

Imports cowplot, ggplot2, gridExtra, purrr, stats

Suggests devtools, knitr, roxygen2, rmarkdown

Depends R (>= 2.10)

License GPL-3

Encoding UTF-8

LazyData true

RoxygenNote 6.1.0

VignetteBuilder knitr

NeedsCompilation no

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ex_qsort	<i>Example datasets for qsort package</i>
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Description

A list containing four hypothetical Q-sort datasets: Attachment Q-set (aqs; version 3.0) (Waters, 1995); California Child Q-set (ccq; Block and Block, 1969); Maternal Behaviour Q-set (version 3.1) (mbqs; Pederson et al., 1999); Preschool Q-set (pq; Baumrind, 1968 revised by Wanda Bronson).

Usage

```
ex_qsort
```

Format

Data frames with 10 rows and a variable number of columns, depending on the number of Q-set items (aqs = 90, ccq = 100, mbqs = 90, pq = 72)

participant Subject identification.

classroom Group identification.

qset1 to ... Items' scores.

Details

For these examples, items were given random scores (1 to 9; least to most characteristic respectively) following a rectangular distribution. For the ccq Q-set this corresponds to placing 11 items in each of the 9 categories, plus an additional one in the center category (i.e., 12 items in category 5). For the remaining Q-sets all the 9 categories include the same number of items (aqs = 10, mbqs = 10, pq = 8).

References

- Baumrind, D. (1968). Manual for the Preschool Behaviour Q-set. Parental Research Project. Berkeley, CA: Institute of Human Development, University of California.
- Block, J. H., & Block, J. (1969). The California Child Q-Set. Berkeley, CA: Institute of Human Development, University of California.
- Pederson, D. R., Moran, G., & Bento, S. (1999). Maternal Behaviour Q-sort (version 3.1). London, ON: Psychology Department, Western University.
- Waters, E. (1995). Appendix A: The attachment Q-set (Version 3. 0). Monographs of the Society for Research in Child Development, 60, 234-246.

print_cards

print_cards

Description

print_cards creates a pdf document in a specified directory, with item's descriptions displayed on separate cards.

Usage

```
print_cards(qset, desc_col = "description", dir.print)
```

Arguments

qset	A data frame containing the Q-set items' descriptions. For details see for example ?qset_aqs, ?qset_cqq, ?qset_mbqs and ?qset_pq.
desc_col	Column name of qsets data frame containing items' descriptions.
dir.print	Directory path where .pdf file will be saved

Value

a pdf document with item's descriptions displayed on separate cards.

References

- Baumrind, D. (1968). Manual for the Preschool Behaviour Q-set. Parental Research Project. Berkeley, CA: Institute of Human Development, University of California.
- Block, J. H., & Block, J. (1969). The California Child Q-Set. Berkeley, CA: Institute of Human Development, University of California.
- Pederson, D. R., Moran, G., & Bento, S. (1999). Maternal Behaviour Q-sort (version 3.1). London, ON: Psychology Department, Western University.
- Waters, E. (1995). Appendix A: The attachment Q-set (Version 3. 0). Monographs of the Society for Research in Child Development, 60, 234-246.

Examples

```
print_cards(qset_aqs, desc_col = "description", dir.print = tempdir())
```

qset_aqs

AQS Q-set criteria scores and derived scales

Description

A data frame containing the Attachment Q-set (aqs; version 3.0). In this dataset, column names ending in "_c" refer to criteria sorts' scores, while column names ending in "_s" refer to scales' scores.

Usage

```
qset_aqs
```

Format

AQS dataset with 90 rows (items) and 9 columns.

item Item number from 1 to 90.

qset aqs. Attachment Q-set (version 3.0) (Waters, 1995).

sec_c Security criterion scores (retrieved from Waters et al., 1995).

dep_c Dependency criterion scores (retrieved from Waters et al., 1995).

pederson_s Pederson & Moran's (1995) scales (retrieved from Waters et al., 1995). comp = compliance; sb = secure base, fd = fussy/difficult; epc = enjoys physical contact; as = affective sharing.

pederson_s_inv Items to be inverted in Pederson and Moran scales.

posada_s Posada et al.'s (1995) scales (retrieved from Waters et al., 1995). sim = smooth interactions with mother; pcm = physical contact with mother; ioa = interactions with other adults; pm = proximity to mother.

posada_s_inv Items to be inverted in Posada et al.'s scales.

description Item description (retrieved from Waters, 1995).

References

Posada, G., Waters, E., Crowell, J. A., & Lay, K. (1995). Is it easier to use a secure mother as a secure base? Attachment Q-Sort correlates of the adult attachment interview. *Monographs of the Society for Research in Child Development*, 60 (2/3), 133-145.

Pederson, D. R., & Moran, G. (1995). A categorical description of infant-mother relationships in the home and its relation to Q-sort measures of infant-mother interaction. *Monographs of the Society for Research in Child Development*, 60 (2/3), 111-132.

Waters, E. (1995). Appendix A: The attachment Q-set (Version 3. 0). Monographs of the Society for Research in Child Development, 60 (2/3), 234-246.

Waters, E., Vaughn, B. E., Posada, G., & Kondo-Ikemura, K. (1995). Appendix D: Scoring key for Q-sort criteria and derived scales in the attachment Q-set and the attachment Q-set for infant macaques item sets. Monographs of the Society for Research in Child Development, 60 (2/3), 280-282.

qset_ccq *CCQ Q-set criteria scores and derived scales*

Description

A data frame containing the California Child Q-set (ccq). In this dataset, column names ending in "_c" refer to criteria sorts' scores, while column names ending in "_s" refer to scales' scores.

Usage

qset_ccq

Format

CCQ dataset with 100 rows (items) and 6 columns.

item Item number from 1 to 100.

qset ccq. California Child Q-set (Block & Block, 1969).

scomp_c Social competence criterion scores (retrieved from Waters et al., 1985).

sest_c Self-esteem criterion scores (retrieved from Waters et al., 1985).

sest_c Self-esteem criterion scores (retrieved from Waters et al., 1985).

egores_c Ego-resiliency criterion scores (Block & Block, 1980; retrieved from Brian Vaughn, personal communication).

egocont_c Ego-control criterion scores (Block & Block, 1980; retrieved from Brian Vaughn, personal communication).

shields_s Emotion regulation scale (retrieved from Shields and Cicchetti, 1997)

shields_s_inv Items to be inverted in emotion regulation scale.

description Item description (retrieved from Waters et al., 1985).

References

Block, J. H., & Block, J. (1969). The California Child Q-Set. Berkeley, CA: Institute of Human Development, University of California.

Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), Minnesota symposium on child psychology: Vol. 13. Development of cognition affect, and social relations (pp. 39–101), Hillsdale, NJ: Erlbaum.

Shields, A., & Cicchetti, D. (1997). Emotion regulation among school-age children: The development and validation of a new criterion q-sort scale. *Developmental Psychology*, 33, 906-916.

Waters, E., Noyes, D. M., Vaughn, B. E., & Ricks, M. (1985). Q-sort definitions of social competence and self-esteem: Discriminant validity of related constructs in theory and data. *Developmental Psychology*, 21, 508-522.

qset_mbqs

MBQS Q-set criteria scores and derived scales

Description

A data frame containing the Maternal Behaviour Q-set (mbqs; version 3.1). In this dataset, column names ending in "_c" refer to criteria sorts' scores, while column names ending in "_s" refer to scales' scores.

Usage

qset_mbqs

Format

MBQS dataset with 90 rows (items) and 4 columns.

item Item number from 1 to 90.

qset mbqs. Maternal Behaviour Q-set (version 3.1) (Pederson et al., 1999).

sens_s Sensibility criterion scores (retrieved from Pederson et al., 1999).

description Item description (retrieved from Pederson et al., 1999).

References

Pederson, D. R., Moran, G., & Bento, S. (1999). *Maternal Behaviour Q-sort (version 3.1)*. London, ON: Psychology Department, Western University.

qset_pq

PQ Q-set criteria scores and derived scales

Description

A data frame containing the Preschool Q-set (pq). In this dataset, column names ending in "_c" refer to criteria sorts' scores, while column names ending in "_s" refer to scales' scores.

Usage

qset_pq

Format

PQ dataset with 72 rows (items) and 6 columns.

item Item number from 1 to 72.

qset pq. Preschool Q-set (Baumrind, 1968 revised by Wanda Bronson).

scomp_c Social competence criterion scores (retrieved from Waters et al., 1985).

sest_c Self-esteem criterion scores (retrieved from Waters et al., 1985).

sdes_c Social desirability criterion scores (retrieved from Waters et al., 1985).

description Item description (retrieved from Waters et al., 1985).

References

Baumrind, D. (1968). Manual for the Preschool Behaviour Q-set. Parental Research Project. Berkeley, CA: Institute of Human Development, University of California.

Waters, E., Noyes, D. M., Vaughn, B. E., & Ricks, M. (1985). Q-sort definitions of social competence and self-esteem: Discriminant validity of related constructs in theory and data. *Developmental Psychology*, 21, 508-522.

qsort_score

qsort_score

Description

qsort_score returns a data frame with scores derived from criteria Q-sorts and from scales created from subsets of items.

Usage

```
qsort_score(x, qset, qsort_length, item1, subj_id = NULL, group_id = NULL)
```

Arguments

x	data frame. x should be in wide format, with each subject data in one row and the scores for qset items in different columns. Columns for qset items' scores should be ordered sequentially from left to right, starting with item 1.
qset	A data frame containing Q-set criterion scores and / or derived scales. For details see for example ?qset_aqs, ?qset_cqq, ?qset_mbqs and ?qset_pq.
qsort_length	The number of items in the qsort.
item1	Column name of x containing item 1 score
subj_id	Optional. Column name of x with subjects' identification codes.
group_id	Optional. Column name of x with groups' identification codes.

Value

qsort_score function returns a data frame. This data frame will have a varying number of columns depending on the number of available criteria sorts and scales for the selected Q-set. Column names ending in "_c" refer to criteria sorts' scores, while column names ending in "_s" refer to scales' scores. Following Waters et al.'s (1985) suggestion about the influence of social desirability bias in Q-sort data, for Q-sets that have social desirability criterion scores, this data frame will also include criteria sorts' scores controlled for social desirability (i.e., partial correlations). Column names starting with "partial_" refer to these scores. The different criteria sorts and scales for each Q-set can be consulted in the documentation of qsets object (?qsets).

References

- Baumrind, D. (1968). Manual for the Preschool Behaviour Q-set. Parental Research Project. Berkeley, CA: Institute of Human Development, University of California.
- Block, J. H., & Block, J. (1969). The California Child Q-Set. Berkeley, CA: Institute of Human Development, University of California.
- Pederson, D. R., Moran, G., & Bento, S. (1999). Maternal Behaviour Q-sort (version 3.1). London, ON: Psychology Department, Western University.
- Waters, E. (1995). Appendix A: The attachment Q-set (Version 3. 0). Monographs of the Society for Research in Child Development, 60, 234-246.
- Waters, E., Noyes, D. M., Vaughn, B. E., & Ricks, M. (1985). Q-sort definitions of social competence and self-esteem: Discriminant validity of related constructs in theory and data. Developmental Psychology, 21, 508-522.

Examples

```
data_ccq <- qsort_score(ex_qsort$ccq,
                      qset_ccq,
                      qsort_length = 100,
                      item1 = "ccq1",
                      subj_id = "participant",
                      group_id = "classroom")

data_ccq

data_aqs <- qsort_score(ex_qsort$aqs,
                      qset_aqs,
                      qsort_length = 90,
                      item1 = "aqs1")
```


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