Package ‘snc’

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Type Package

Title Strongest Neighbor Coherence

Version 0.1.0

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Description Computes Strongest Neighbor Coherence (SNC), a structural diagnostic that replaces Cronbach's alpha using top-k correlation structure.
For methodology, see Wells (2025) <https://github.com/TheotherDrWells/snc>.

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Encoding UTF-8

RoxygenNote 7.3.2

Imports stats

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

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print.snc *Print Method for SNC Objects*

Description

Prints summary output for an object of class "snc".

Usage

```
## S3 method for class 'snc'
print(x, ...)
```

Arguments

x	An object of class "snc" returned by the snc function.
...	Ignored.

Value

No return value. Called for side effects (prints formatted summary).

snc *Strongest Neighbor Coherence (SNC)*

Description

Computes Strongest Neighbor Coherence (SNC), a rotation-free structural diagnostic that evaluates how well each item aligns with its top-k most strongly correlated neighbors.

Usage

```
snc(R, k = 2, factors = NULL, digits = 3)
```

Arguments

R	A square item correlation matrix (symmetric, 1s on the diagonal).
k	Integer. Number of strongest neighbors to use for each item (default = 2).
factors	Optional. A vector of factor assignments for items, used to compute group-level means.
digits	Number of decimal places to round to (default = 3).

Value

An object of class "snc" with:

overall Mean SNC value across all items

items A data frame of item-level SNC values

factors (Optional) A data frame of factor-level mean SNC values

Examples

```
R <- matrix(c(1, .6, .3, .6, 1, .5, .3, .5, 1), 3, 3)
rownames(R) <- colnames(R) <- c("Item1", "Item2", "Item3")
snc(R)
```

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