

# Package ‘pedalfast.data’

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**Title** PEDALFAST Data

**Version** 1.0.2

**Description** Data files and documentation for PEDIatric vALidation of vARIABLES in TBI (PEDALFAST). The data was used in ``Functional Status Scale in Children With Traumatic Brain Injury: A Prospective Cohort Study" by Bennett, Dixon, et al (2016) <[doi:10.1097/PCC.0000000000000934](https://doi.org/10.1097/PCC.0000000000000934)>.

**Language** en-US

**License** GPL-2

**Encoding** UTF-8

**LazyData** true

**Depends** R (>= 3.5.0)

**Suggests** data.table, digest, dplyr, ggplot2, htmltools, kableExtra, knitr, lubridate, qwraps2 (>= 0.6.0), scales, testthat

**VignetteBuilder** knitr

**RoxygenNote** 7.3.2

**NeedsCompilation** no

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fss_as_factor	<i>Functional Status Scale Categories</i>
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## Description

Mapping FSS Total scores (integer values) to categorical values.

## Usage

```
fss_as_factor(x, long_label = FALSE, ...)
```

## Arguments

x	an integer vector
long_label	logical if the score range should be prepended to the label.
...	not currently used.

## Details

FSS scores are integer values from 6 to 30.

The a mapping of ranges of integer values to categories is

- FSS 6, 7: Good
- FSS 8, 9: Mildly abnormal
- FSS 10, 11, 12, 13, 14, 15: Moderately abnormal
- FSS 16, 17, 18, 19, 20, 21: Severe abnormal
- FSS 22, 23, 24, 25, 26, 27, 28, 29, 30: Very severely abnormal

## Value

A factor of equal length to the input x with labels for the categorical ranges of FSS.

## Examples

```
x <- seq(5, 32)
data.frame(x = x,
           short_label = fss_as_factor(x),
           long_label = fss_as_factor(x, long_label = TRUE))
```



## Examples

```
#####
# Mapping from numeric values to factor:
nums <- c(0:7, 2.3)

# with short labels
data.frame(nums = nums,
           eye = gcs_as_factor(nums, scale = "eye"),
           motor = gcs_as_factor(nums, scale = "motor"),
           verbal = gcs_as_factor(nums, scale = "verbal"))

# with long labels
data.frame(nums = nums,
           eye = gcs_as_factor(nums, scale = "eye", long_label = TRUE),
           motor = gcs_as_factor(nums, scale = "motor", long_label = TRUE),
           verbal = gcs_as_factor(nums, scale = "verbal", long_label = TRUE))

#####
# Mapping from factors/characters to numeric values

# A quick way to access the labels and numeric values
pedalfast.data::gcs_ll

all_levels <- do.call(c, lapply(pedalfast.data::gcs_ll, names))

data.frame(lvls = all_levels,
           eye = gcs_as_integer(all_levels, scale = "eye"),
           motor = gcs_as_integer(all_levels, scale = "motor"),
           verbal = gcs_as_integer(all_levels, scale = "verbal")
           )

#####
# Order of the levels:
# The data values are the same, but the order of the levels differs.
gcs_as_factor(1:4, "eye", highest_first = FALSE)
gcs_as_factor(1:4, "eye", highest_first = TRUE)
```

---

onezero

*1/0 Flags*

---

## Description

Turns Yes/No variables into 1/0 integers

## Usage

onezero(x)

**Arguments**

x                    a character vector

**Details**

The input is forced to lowercase and only the first character, the "y" or "n", is used to map to the 1/0 integer values. The function allows for "1" and "0" to be in the character vector as well.

**Value**

an integer vector

**Examples**

```
flag <- c("Y", "No", "NO", "no", "n", "YES", "Yes", "yEs", "1", "0")
onezero(flag)
```

---

pedalfast

*PEDALFAST Data*

---

**Description**

Single data frame for the PEDALFAST data.

**Usage**

```
pedalfast
```

**Format**

An object of class `data.frame` with 388 rows and 103 columns.

**Details**

`pedalfast` is one data frame with the whole of the exported data.

**See Also**

```
vignette("datasets", package = "pedalfast.data")
```

---

pedalfast\_factor      *PEDALFAST factor*

---

### Description

A flavor of the base function factor but aimed to use specific default values for levels and labels based on the information in the [pedalfast\\_metadata](#) object.

### Usage

```
pedalfast_factor(x, variable, label_with_level = FALSE, ...)
```

### Arguments

x	a vector of data
variable	character string identifying the variable name in pedalfast_metadata defining the levels and labels for the factor.
label_with_level	(default to FALSE) labels will include the integer value. See examples.
...	not currently used.

### Value

An object of class factor

### References

Bennett TD, Dixon RR, Kartchner C, DeWitt PE, Sierra Y, Ladell D, Kempe A, Runyan DK, Dean JM, Keenan HT. Functional Status Scale in Children With Traumatic Brain Injury: A Prospective Cohort Study. *Pediatr Crit Care Med*. 2016 Dec;17(12):1147-1156. doi: 10.1097/PCC.0000000000000934. PMID: 27753754; PMCID: PMC5138132.

Pollack MM, Holubkov R, Funai T, et al. Pediatric intensive care outcomes: development of new morbidities during pediatric critical care. *Pediatr Crit Care Med*. 2014;15(9):821-827. doi:10.1097/PCC.0000000000000250

### Examples

```
data(pedalfast, pedalfast_metadata, package = "pedalfast.data")

# The Motor GCS in the emergency department is reported as an integer value.
str(pedalfast$gcsmotored)

# Each integer value a specific meaning
pedalfast_metadata[grepl("gcsmotored", pedalfast_metadata$variable), ]

# Creating the factor in base R

pedalfast_factor(x = c(1, 3, 2), variable = "gcsmotored")
pedalfast_factor(x = c(1, 3, 2), variable = "gcsmotored", label_with_level = TRUE)
```

---

pedalfast_metadata	<i>PEDALFAST Metadata</i>
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**Description**

pedalfast\_metadata provides documentation for each of variables in the pedalfast.

**Usage**

```
pedalfast_metadata
```

**Format**

An object of class data.frame with 103 rows and 3 columns.

**See Also**

```
vignette("datasets", package = "pedalfast.data")
```

---

round_age	<i>Round Age</i>
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**Description**

Round age per FITBIR guidelines

**Usage**

```
round_age(x, type = "character")
```

**Arguments**

x	a numeric vector
type	defaults to character (default), also accepts numeric.

**Details**

FITBIR Definition for the "AgeYrs" data element: Value for participant's subject age, calculated as elapsed time since the birth of the participant/subject in years. The subjects age is typically recorded to the nearest full year completed, e.g. 11 years and 6 months should be recorded as 11 years.

Guidelines & Instructions: The subject's age is typically recorded to the nearest full year completed, e.g. 11 years and 6 months should be recorded as 11 years. For subject's which are under 1 year old, use decimal points and use the following convention- record 1 month as 0.083 (1/12), 2 months as 0.166 (2/12), 3 months as 0.25 (3/12), 4 months as 0.333 (4/12), 5 months as 0.416 (5/12), 6 months as 0.5 (6/12), 7 months as 0.583 (7/12), 8 months as 0.666 (8/12), 9 months as 0.75 (9/12), 10 months as 0.833 (10/12), 11 months as 0.916 (11/12) and 12 months as 1 year. For the individuals 90 or older, in order to preserve PII, please submit "150" and make a note this in the "general notes" column.

**Value**

a character or numeric vector depending on the value of type.

**Examples**

```
ages <- c(92, 12.12, 89 + 10/12, 9.12, 9.73, 1.1, 1.75, ( 1:11 + 0.05 ) / 12,
2, 90)
```

```
round_age(ages)
round_age(ages, "numeric")
```

---

yesno

*Yes No Flags*

---

**Description**

Turns 1/0 into "Yes"/"No"

**Usage**

```
yesno(x)
```

**Arguments**

x                    an integer vector

**Value**

a character vector

**Examples**

```
flag <- c(0, 1, 1, 0, 0, 0)
yesno(flag)
```

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