Package 'fxl'

June 5, 2024

Type Package

Title 'fxl' Single Case Design Charting Package

Version 1.7.1

Suggests covr, knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Description

The 'fxl' Charting package is used to prepare and design single case design figures that are typically prepared in spreadsheet software. With 'fxl', there is no need to leave the R environment to prepare these works and many of the more unique conventions in single case experimental designs can be performed without the need for physically constructing features of plots (e.g., drawing annotations across plots). Support is provided for various different plotting arrangements (e.g., multiple baseline), annotations (e.g., brackets, arrows), and output formats (e.g., svg, rasters).

License GPL (>= 3)

Encoding UTF-8

LazyData true

Depends R (>= 4.1), rlang

RoxygenNote 7.2.3

Config/testthat/edition 3

NeedsCompilation no

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Repository CRAN

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---

assert_input_type   *assert_input_type*

Description

assert_input_type

Usage

```
assert_input_type(object, types = character(0), tag = "")
```

Arguments

object	some type of object
types	list of object types acceptable
tag	var to reference in error message

Value

no return value, run for side effects

Challenge1Data   *Twitter chart challenge data 1*

Description

Twitter chart challenge data 1

Usage

```
Challenge1Data
```

Format

A data frame with 226 rows and 11 variables:

StudyID Extracted study ID

FigureNum Extracted study figure number

PanelNum Extracted study panel number

CaseName Extracted study case name

CaseNum Extracted study number

X Session

OutcomeName Extracted study outcome name

Direction Direction of trend

Y Outcome measure

CondName Extracted study condition

CondNum Extracted study number

Challenge2Data *Twitter chart challenge data 2*

Description

Twitter chart challenge data 2

Usage

Challenge2Data

Format

A data frame with 113 rows and 5 variables:

Participant Participant name

Session Session number

Condition Condition name

IWS Incorrect word sequences

CWS Correct word sounds

Challenge4Data   *Twitter chart challenge data 4*

Description

Twitter chart challenge data 4

Usage

```
Challenge4Data
```

Format

A data frame with 189 rows and 11 variables:

Session Session number

Participant Participant name

Phase Phase name

Number.Writing.Fluency Fluency of number writing

Dot.Number Fluency of dot number skills

Dot.Number.Total Fluency of dot number skills on all sets

Number.Total Number writing fluency on all sets

Number.Writing.Fluency_Accuracy Number writing accuracy

Dot.Number_Accuracy Dot number accuracy

Dot.Number.Total_Accuracy Dot number accuracy on all sets

Number.Total_Accuracy Number writing accuracy on all sets

---

cnvrt_coords   *cnvrt_coords*

Description

Pulled from the TeachingDemos package (GPLv2+ Licensed)

Usage

```
cnvrt_coords(x, y = NULL, input = c("usr", "plt", "fig", "dev", "tdev"))
```

Arguments

x	abscissa
y	ordnate
input	device

Details

Slightly hacked/trimmed

Value

Transformation of coordinates from local plot to figure space for phase changes

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>, Greg Snow <538280@gmail.com>

---

draw_arrows   *draw_arrows*

Description

drawing function

Usage

```
draw_arrows(core_frame, current_layer, facet_name)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_bar_support *draw_bar_support*

Description

Draw bars, but on a secondary axis

Usage

```
draw_bar_support(core_frame, current_layer, facet_name, max_y)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet
max_y	top of y axis to match

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_brackets *draw_brackets*

Description

drawing function

Usage

```
draw_brackets(core_frame, current_layer, facet_name)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_cumsum_lines   *draw_cumsum_lines*

Description

draw_cumsum_lines

Usage

```
draw_cumsum_lines(core_frame, current_layer, facet_name)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_cumsum_points   *draw_cumsum_points*

Description

draw_cumsum_points

Usage

```
draw_cumsum_points(core_frame, current_layer, facet_name)
```

Arguments

`core_frame`	fxl object
`current_layer`	layer to be drawn
`facet_name`	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`draw_guide_line`   *draw_guide_line*

Description

draw_guide_line

Usage

```
draw_guide_line(core_frame, current_layer, facet_name)
```

Arguments

`core_frame`	fxl object
`current_layer`	layer to be drawn
`facet_name`	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_label_facet   *draw_label_facet*

Description

drawing function

Usage

```
draw_label_facet(core_frame, current_layer, facet_name)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_label_phase   *draw_label_phase*

Description

drawing function

Usage

```
draw_label_phase(core_frame, current_layer, facet_name)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_legend   *draw_legend*

Description

drawing function

Usage

```
draw_legend(core_frame)
```

Arguments

core_frame   fxl object

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_lines   *draw_lines*

Description

drawing function

Usage

```
draw_lines(core_frame, current_layer, facet_name)
```

Arguments

core_frame   fxl object
current_layer   layer to be drawn
facet_name   name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_points *draw_points*

Description

drawing function

Usage

```
draw_points(core_frame, current_layer, facet_name, zero_axis = FALSE)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet
zero_axis	filter out all but zeros

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_rect *draw_rect*

Description

drawing function

Usage

```
draw_rect(core_frame, current_layer, facet_name, zero_axis = FALSE)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet
zero_axis	filter out all but zeros

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_scr_criterion *draw_scr_criterion*

Description

drawing function

Usage

```
draw_scr_criterion(core_frame, current_layer, facet_name)
```

Arguments

core_frame	fxl object
current_layer	layer to be drawn
facet_name	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

draw_scr_plines *draw_scr_plines*

Description

drawing function

Usage

```
draw_scr_plines(core_frame, current_layer, facet_name)
```

Arguments

`core_frame`	fxl object
`current_layer`	layer to be drawn
`facet_name`	name of facet

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

`GelinoEtAl2022`   *Plotting data from Koffarnus et al. (2011)*

Description

Treatment data from Koffarnus et al. (2011)

Usage

```
GelinoEtAl2022
```

Format

A data frame with 9 rows and 1 variables:

Condition Baseline vs. policy condition

Time Time of study

SC Slope change dummy code

yhat Predicted value from model

Count1 Count for site 1

Count2 Count for site 2

Count3 Count for site 3

Count4 Count for site 4

Facet Facet/subplot number

Source

<doi:https://doi.org/10.1002/jaba.967>

Gilroyetal2015   *Plotting data from Gilroy et al. (2015)*

Description

This is data either extracted or included (with permission) to assist with illustrating and replicating the functionality of the package. Specifically, this data is used to illustrate conventions regarding a multiple probe design and how that may be constructed in this package.

Usage

```
Gilroyetal2015
```

Format

A data frame with 40 rows and 6 variables:

Participant Participant name

Session Session number

Condition Condition name

Responding Responding rates

PhaseNum Phase number

LineOff Offset for phase line

Source

<doi:https://doi.org/10.1016/j.rasd.2015.04.004>

Gilroyetal2019   *Plotting data from Gilroy et al. (2019) - FA*

Description

Data from this study (provided with permission) is used to illustrate how findings from a functional analysis can be drawn using the package. Generally, its the same type of functionality required in an alternating treatment design approach.

Usage

```
Gilroyetal2019
```

Format

A data frame with 15 rows and 9 variables:

Session Session number
SIB Rates of self-injury
AGG Rates of aggression
DIS Rates of disruptive behavior
Prompt Rates of prompting
Comply Rates of compliance
SR Duration of reinforcement
CTB Rates of combined target behavior
Condition Functional analysis condition

Source

<doi:https://doi.org/10.1080/17518423.2019.1646342>

Gilroyetal2019Tx   *Plotting data from Gilroy et al. (2019) - Treatment*

Description

This is data either extracted or included (with permission) to assist with illustrating and replicating the functionality of the package. Specifically, this data is used to illustrate conventions regarding combined design elements that include multiple baseline and reversal design elements.

Usage

```
Gilroyetal2019Tx
```

Format

A data frame with 86 rows and 8 variables:

Participant Participant name
Session Session number
Condition Functional analysis condition
CTB Rates of combined target behavior
FCR Rates for communication response for function 1
FCR2 Rates for communication response for function 2
PhaseNum Sequenced phase number
LineOff Offset of phase line

Source

<doi:https://doi.org/10.1080/17518423.2019.1646342>

Gilroyetal2021   *Plotting data from Gilroy et al. (2015) - Treatment*

Description

Treatment data from Gilroy et al. (2021)

Usage

```
Gilroyetal2021
```

Format

A data frame with 69 rows and 7 variables:

Participant Participant name
Session Session number
Condition Functional analysis condition
Responding Rates of responding
Reinforcers Reinforcer deliveries
PhaseNum Sequenced phase number
LineOff Offset of phase line

Source

<doi:https://doi.org/10.1002/jaba.826>

---

isValidAestheticMapping
                            isValidAestheticMapping

Description

isValidAestheticMapping

Usage

```
isValidAestheticMapping(object = NULL, name = NULL)
```

Arguments

object	dataframe (hopefully)
name	name for object

Value

no return value, run for side effects

isValidAXSCharacter   *isValidAXSCharacter*

Description

isValidAXSCharacter

Usage

isValidAXSCharacter(object = NULL, name = NULL)

Arguments

object	some type of object
name	parameter name

Value

no return value, run for side effects

isValidCharacterVector

isValidCharacterVector

Description

isValidCharacterVector

Usage

isValidCharacterVector(object = NULL, length = -1, name = NULL)

Arguments

object	some type of object
length	expected length
name	parameter name

Value

no return value, run for side effects

isValidDataFrame *isValidDataFrame*

Description

isValidDataFrame

Usage

```
isValidDataFrame(object = NULL, name = NULL)
```

Arguments

object   dataframe (hopefully)

name   name for object

Value

no return value, run for side effects

isValidLogicalVector *isValidLogicalVector*

Description

isValidLogicalVector

Usage

```
isValidLogicalVector(object = NULL, length = -1, name = NULL)
```

Arguments

object   some type of object

length   expected length

name   parameter name

Value

no return value, run for side effects

---

isValidNumericVector   *isValidNumericVector*

Description

isValidNumericVector

Usage

```
isValidNumericVector(object = NULL, length = -1, name = NULL)
```

Arguments

object	some type of object
length	expected length
name	parameter name

Value

no return value, run for side effects

KoffarnusEtAl2011   *Plotting data from Koffarnus et al. (2011)*

Description

Treatment data from Koffarnus et al. (2011)

Usage

```
KoffarnusEtAl2011
```

Format

A data frame with 14979 rows and 3 variables:

X Session/day number

ID Participant ID on the Y axis

Code Status for treatment

Source

<doi:https://doi.org/10.1093/alcalc/agr057>

LozyEtAl2020   *Plotting data from Lozy et al. (2020)*

Description

Treatment data from Lozy et al. (2020)

Usage

LozyEtAl2020

Format

A data frame with 91 rows and 5 variables:

Session Session number

Participant Participant name

KM Kinesthetic movement choices

TD Traditional drill choices

Phase Sequenced phase number

Source

<doi:https://doi.org/10.1002/jaba.677>

---

print.fxl   *print.fxl*

Description

Override the final call to print the fxl object. catches the obj and prints out layers in the sequence laid out by the user

Usage

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

Arguments

x   fxl object

...   inherits from generic

Value

no return, executed for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

print.fxlsemilog   *print.fxlsemilog*

Description

Override the final call to print the fxl object. catches the obj and prints out layers in the sequence
laid out by the user

Usage

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

Arguments

x   fxlsemilog object

...   inherits from generic

Value

no return, executed for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_anno_arrows   *scr_anno_arrows*

Description

Add a layer with arrows to direct attention on the plot

Usage

```
scr_anno_arrows(
  core_frame,
  arrows = NULL,
  facet = NULL,
  color = "black",
  length = 0.25,
  angle = 30,
  code = 2,
  lwd = 1,
  lty = 1
)
```

Arguments

`core_frame`	fxl class
`arrows`	list of keyed entries to be drawn on respective facets
`facet`	the facet which will be drawn upon
`color`	from base
`length`	from base
`angle`	from base
`code`	from base
`lwd`	from base
`lty`	from base

Details

Generally useful for avoiding a legend

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_anno_brackets *scr_anno_brackets*

Description

Add a layer with brackets on plot

Usage

```
scr_anno_brackets(
  core_frame,
  brackets = NULL,
  facet = NULL,
  color = "black",
  length = 0.25,
  angle = 30,
  code = 2,
  lwd = 1,
  lty = 1
)
```

Arguments

core_frame	fxl class
brackets	list of keyed entries to be drawn on respective facets
facet	the facet which will be drawn upon
color	from base
length	from base
angle	from base
code	from base
lwd	from base
lty	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_anno_guide_line *scr_anno_guide_line*

Description

This is an annotation illustrating an aim/reduction line

Usage

```
scr_anno_guide_line(
  core_frame,
  coords,
  facet = NA,
  color = "black",
  lty = 1,
  lwd = 1
)
```

Arguments

core_frame	fxl object
coords	start and finish coords for aim line
facet	panel to draw upon
color	from base
lty	line type
lwd	line width

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_anno_rect   *scr_anno_rect*

Description

scr_anno_rect

Usage

```
scr_anno_rect(core_frame, rects = NULL, color = "black", fill = "black")
```

Arguments

core_frame	fxl object
rects	list of keyed entries to be drawn on respective facets
color	from base
fill	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_bar_support   *scr_bar_support*

Description

Adds a supplemental bar to the figure, if relevant to the data

Usage

```
scr_bar_support(
  core_frame,
  color = rgb(0.8, 0.8, 0.8, alpha = 0.25),
  alpha = 1,
  guide_line = NULL,
  guide_line_type = 1,
  guide_line_size = 1,
  guide_line_color = "black",
  mapping = NULL,
  label = "",
```

```
  styler = NA,
  width = 0.8,
  adj = 0.5
)
```

Arguments

core_frame	fxl object
color	from base
alpha	from base
guide_line	(optional) aim line for bars
guide_line_type	
	(optional) aim line type for bars
guide_line_size	
	(optional) aim line size for bars
guide_line_color	
	(optional) aim line color for bars
mapping	(optional) if overriding draw (i.e., different response)
label	description for bar
styler	a lambda function that returns dynamic styling parameters
width	width of bar
adj	adjustment for y label

Value

a layer to the core plotting object

---

scr_criterion_lines   *scr_criterion_lines*

Description

scr_criterion_lines

Usage

```
scr_criterion_lines(
  core_frame,
  lty = 1,
  color = "black",
  size = 1,
  lines = NULL
)
```

Arguments

core_frame	fxl object
lty	from base
color	from base
size	from base
lines	lines to draw

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_cumsum_lines   *scr_cumsum*

Description

Draw lines, but as a cumulative and rolling sum

Usage

```
scr_cumsum_lines(core_frame, lty = 1, color = "black", size = 1, mapping)
```

Arguments

core_frame	fxl object
lty	from base
color	from base
size	from base
mapping	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_cumsum_points *scr_cumsum_points*

Description

scr_cumsum_points

Usage

```
scr_cumsum_points(
  core_frame,
  pch = 21,
  color = "black",
  fill = "black",
  cex = 1,
  mapping
)
```

Arguments

core_frame	fxl object
pch	from base
color	from base
fill	from base
cex	from base
mapping	(optional) if overriding draw (i.e., different response)

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_label_facet   *scr_label_facet*

Description

scr_label_facet

Usage

```
scr_label_facet(
  core_frame,
  color = "black",
  cex = 1,
  adj = 0.5,
  face = 1,
  x = NULL,
  y = NULL,
  labels = NULL
)
```

Arguments

core_frame	fxl object
color	from base
cex	from base
adj	from base
face	like 'font' from base
x	global x position for labels
y	global y position for labels
labels	as stated

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_label_phase   *scr_label_phase*

Description

labels to be drawn on plots (typically for phases/conditions, but not necessarily)

Usage

```
scr_label_phase(
  core_frame,
  color = "black",
  cex = 1,
  adj = 0.5,
  face = 1,
  x = NULL,
  y = NULL,
  facet = NULL,
  labels = NULL
)
```

Arguments

core_frame	fxl object
color	from base
cex	from base
adj	from base
face	like 'font' from base
x	location
y	location
facet	facet of interest
labels	as stated

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_legend   *scrlegend*

Description

Information for drawing legend onto plots

Usage

```
scr_legend(
  core_frame,
  panel = NA,
  legend,
  bg = NULL,
  col = NULL,
  pt_bg = NULL,
  lty,
  pch,
  box_lty = 0,
  adj = c(0, 0.5),
  bty = "n",
  cex = 1,
  horiz = FALSE,
  position = "topright",
  pt_cex = 1,
  text_col = "black",
  border = "black"
)
```

Arguments

core_frame	fxl object
panel	facet to be drawn on
legend	from base
bg	from base
col	from base
pt_bg	color, for point
lty	from base
pch	from base
box_lty	from base
adj	alignment
bty	from base
cex	from base

horiz	from base
position	from base
pt_cex	from base
text_col	from base
border	border status (from base)

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_lines	*scr_lines*

Description

scr_lines

Usage

```
scr_lines(core_frame, lty = 1, color = "black", size = 1, mapping)
```

Arguments

core_frame	fxl object
lty	from base
color	from base
size	from base
mapping	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_plines   *scr_plines*

Description

scr_plines

Usage

```
scr_plines(core_frame, lines = NULL, lwd = 1, lty = 1, col = "black")
```

Arguments

core_frame	fxl object
lines	phase lines to be drawn
lwd	from base
lty	from base
col	from base

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_plines_mbd   *scr_plines_mbd*

Description

scr_plines_mbd

Usage

```
scr_plines_mbd(core_frame, lty = 1, lines = NULL)
```

Arguments

core_frame	fxl object
lty	phase lines types
lines	phase lines to be drawn

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_plot   *scrplot*

Description

Core object for establishing fxl object and layers

Usage

```
scr_plot(
  data,
  aesthetics = NULL,
  mai = c(0.375, 0.375, 0.25, 0.25),
  omi = c(0.25, 0.25, 0.25, 0.25),
  xaxs = "i",
  yaxs = "i",
  ncol = 1,
  family = "sans",
  bty = "l",
  layout = NA,
  layout_h = NA,
  layout_v = NA,
  semi_color_major_y = "blue",
  semi_color_midpoint_y = "blue",
  semi_color_minor_y = "lightgray",
  semi_color_major_x = "lightgray",
  semilog = FALSE
)
```

Arguments

data	submitted data (not opinionated on naming)
aesthetics	references for data in frame
mai	margins in inches
omi	outer margins in inches
xaxs	x axis formatting, relative to hanging space
yaxs	y axis formatting, relative to hanging space
ncol	number of colums in layout (default = 1)

family	font family
bty	TODO
layout	layout grid
layout_h	layout heights
layout_v	layout widths
semi_color_major_y	
	colors for semilog lines (major)
semi_color_midpoint_y	
	colors for semilog lines (center bins)
semi_color_minor_y	
	colors for semilog lines (minor)
semi_color_major_x	
	colors for semilog lines (minor)
semilog	determine if this is a semilog type of plot

Value

class of 'fxl' that contains necessary plotting elements

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_points   *scr_points*

Description

scr_points

Usage

```
scr_points(
  core_frame,
  pch = 21,
  color = "black",
  fill = "black",
  cex = 1,
  styler = NA,
  data = NA,
  mapping
)
```

Arguments

core_frame	fxl object
pch	from base
color	from base
fill	from base
cex	from base
styler	a lambda function that returns dynamic styling parameters
data	(optional) if overriding data
mapping	(optional) if overriding draw (i.e., different response)

Value

a layer to the core plotting object

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_save   *scrsave*

Description

Function for outputting fxl object at preset size (certain journal are opinionated on size, format, and density)

Usage

```
scr_save(
  core_frame,
  units = "in",
  name = "test.tiff",
  format = "tiff",
  width = 8,
  height = 4,
  res = 600
)
```

Arguments

core_frame	fxl object
units	from base
name	from base
format	type of image to save in
width	from base
height	from base
res	from base

Value

no return, executed for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_title *scrtitle*

Description

Override the title

Usage

```
scr_title(core_frame, var, color = "black", cex = 1, adj = 0.5, face = 1)
```

Arguments

core_frame	fxl object
var	string
color	from base
cex	from base
adj	from base
face	like 'font' from base

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_xlabel   *xlabel*

Description

Override the x axis label

Usage

```
scr_xlabel(
  core_frame,
  var,
  color = "black",
  cex = 1,
  adj = 0.5,
  face = 1,
  line = 0
)
```

Arguments

core_frame	fxl object
var	string
color	from base
cex	from base
adj	from base
face	like 'font' from base
line	line width

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_xoverride *xoverride*

Description

Override the x axis limits

Usage

```
scr_xoverride(
  core_frame,
  var,
  xdelta = 1,
  xticks = NULL,
  xdraws = NULL,
  xrotation = NULL,
  xtickscex = 1,
  xlabeloffset = NULL,
  xtickslabs = NULL,
  xticksadj = 1
)
```

Arguments

core_frame	fxl object
var	string for title
xdelta	skips between ticks (can override)
xticks	specify ticks, vector or named list
xdraws	which x axes to draw
xrotation	degree to rotate positioned labels
xtickscex	expansion factor for labels
xlabeloffset	offset to push labels downward
xtickslabs	labels for x axis
xticksadj	alignment for custom labels

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

---

scr_ylabel *ylabel*

Description

Override the y axis label

Usage

```
scr_ylabel(
  core_frame,
  var,
  color = "black",
  cex = 1,
  adj = 0.5,
  face = 1,
  line = 0
)
```

Arguments

core_frame	fxl object
var	string
color	from base
cex	from base
adj	from base
face	like 'font' from base
line	line width

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

scr_yoverride *yoverride*

Description

Override the y axis (or axes) limits

Usage

```
scr_yoverride(
  core_frame,
  var,
  ydelta = 1,
  yticks = NULL,
  ydraws = NULL,
  ytickslabs = NULL
)
```

Arguments

core_frame	fxl object
var	from base
ydelta	skips between ticks (can override)
yticks	tick values (numerical)
ydraws	specify axes manual
ytickslabs	tick labels

Value

nothing, run for side effects

Author(s)

Shawn Gilroy <sgilroy1@lsu.edu>

```
SimulatedAcademicFluency
```
Plotting data for Hypothetical Academic MTSS

Description

Plotting data for Hypothetical Academic MTSS

Usage

```
SimulatedAcademicFluency
```

Format

A data frame with 168 rows and 7 variables:

Rates Rates of change

Times Multiplier for model level

index Individual id

starts Modeled baseline start

jitter Jitter offset

pred Prediction from model

err Residual error

```
var_map
```
var_map

Description

This helper function maps out relationships to be parsed later on

Usage

```
var_map(...)
```

Arguments

...   map expressed relationships out

Value

list of exprs to map variables to plotting methods

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