

default.R

2025-03-24

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Contents

1 Reading a Stata file

rio doesn't do a good job here.

```
library(haven)

dd <- read_dta('~ /Courses_taken/2025_Discrimination_Research/session1.dta')

# Conversion of Stat (.dta) objects as read by 'haven::read_sta()'
```

```

conv <- function(object, ...) UseMethod("conv")
conv.haven_labelled <- function(object,...) haven::as_factor(object)
conv.default <- function(object,...) object
conv.data.frame <- function(object,...){
  object[] <- lapply(object, conv)
  as.data.frame(object)
}
dd <- conv(dd)
head(dd)

```

##	year	serial	month	cpsid	asecflag	asecwth	statefip	county	pernum
## 1	2024	6	March	2.02302e+13	ASEC	601.57	Maine	0	1
## 2	2024	6	March	2.02302e+13	ASEC	601.57	Maine	0	2
## 3	2024	6	March	2.02302e+13	ASEC	601.57	Maine	0	3
## 4	2024	7	March	2.02301e+13	ASEC	1559.99	Maine	0	1
## 5	2024	7	March	2.02301e+13	ASEC	1559.99	Maine	0	2
## 6	2024	8	March	2.02402e+13	ASEC	580.60	Maine	0	1

##		cpsidp	cpsidv	asecwt	age	sex	race	marst
## 1		2.02302e+13	2.02302e+14	601.57	85	Female	White	Married, spouse present
## 2		2.02302e+13	2.02302e+14	601.57	85	Male	White	Married, spouse present
## 3		2.02302e+13	2.02302e+14	1312.04	15	Female	White	Never married/single
## 4		2.02301e+13	2.02301e+14	1559.99	53	Female	White	Married, spouse present
## 5		2.02301e+13	2.02301e+14	1559.99	52	Male	White	Married, spouse present
## 6		2.02402e+13	2.02402e+14	580.60	68	Male	White	Widowed

##		citizen	hispan	empstat	labforce
## 1		Born in U.S	Not Hispanic	NILF, retired	No, not in the labor force
## 2		Born in U.S	Not Hispanic	NILF, retired	No, not in the labor force
## 3		Born in U.S	Not Hispanic	NILF, other	No, not in the labor force
## 4		Born in U.S	Not Hispanic	NILF, unable to work	No, not in the labor force
## 5		Born in U.S	Not Hispanic	At work	Yes, in the labor force
## 6		Not a citizen	Not Hispanic	NILF, unable to work	No, not in the labor force

##		occ	educ	diffany
## 1		0 High school diploma or equivalent	Has difficulty	
## 2		0 High school diploma or equivalent	No difficulty	

```
## 3      0                      Grades 7 or 8  No difficulty
## 4      0 High school diploma or equivalent Has difficulty
## 5 5240          Some college but no degree  No difficulty
## 6      0                      Grades 7 or 8  Has difficulty
```

```
lapply(dd, class)
```

```
## $year
## [1] "numeric"
##
## $serial
## [1] "numeric"
##
## $month
## [1] "factor"
##
## $cpsid
```

```
## [1] "numeric"
##
## $asecflag
## [1] "factor"
##
## $asecwth
## [1] "numeric"
##
## $statefip
## [1] "factor"
##
## $county
## [1] "numeric"
##
## $pernum
## [1] "numeric"
##
```

```
## $cpsidp
## [1] "numeric"
##
## $cpsidv
## [1] "numeric"
##
## $asecwt
## [1] "numeric"
##
## $age
## [1] "factor"
##
## $sex
## [1] "factor"
##
## $race
## [1] "factor"
```

```
##  
## $marst  
## [1] "factor"  
##  
## $citizen  
## [1] "factor"  
##  
## $hispan  
## [1] "factor"  
##  
## $empstat  
## [1] "factor"  
##  
## $labforce  
## [1] "factor"  
##  
## $occ
```



```
## [1] "numeric"  
##  
## $educ  
## [1] "factor"  
##  
## $diffany  
## [1] "factor"
```

2 Raster pdf for fast plotting of very large vector graphics

```
# install.packages('rasterpdf')  
library(spida2)  
  
##  
## Attaching package: 'spida2'
```

```
## The following object is masked from 'package:base':
```

```
##
```

```
##      grepv
```

```
library(rasterpdf)
```

```
##
```

```
## Attaching package: 'rasterpdf'
```

```
## The following object is masked from 'package:grDevices':
```

```
##
```

```
##      dev.off
```

```
# help(p=rasterpdf)
```

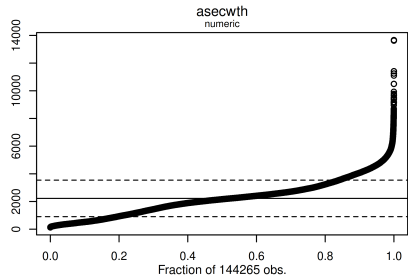
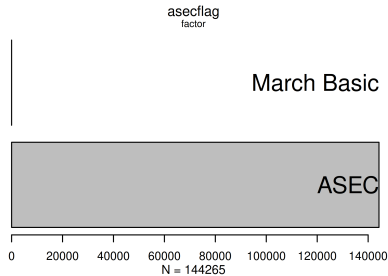
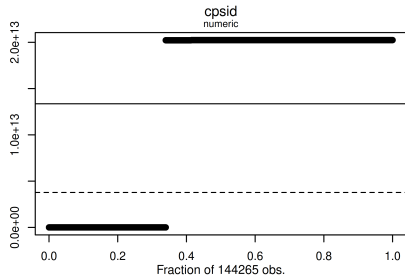
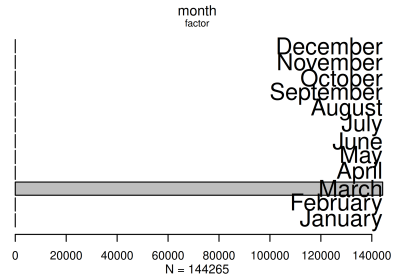
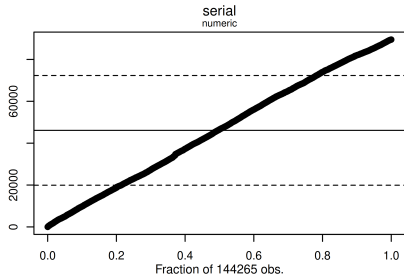
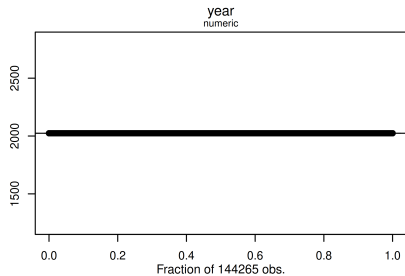
```
ls(2)
```

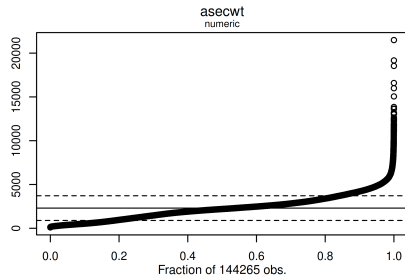
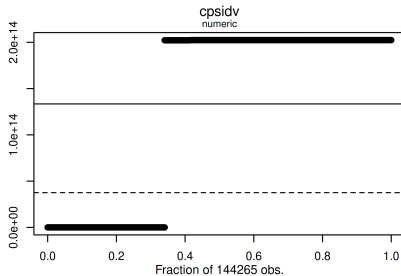
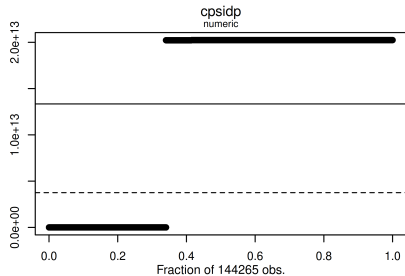
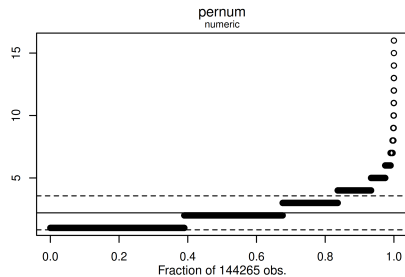
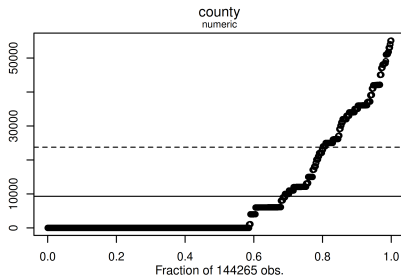
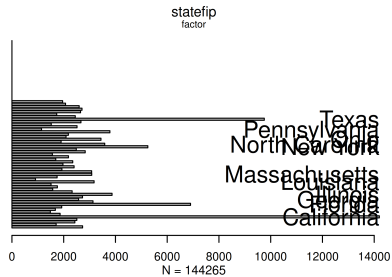
```
## [1] "agg_pdf"      "dev.off"      "raster_pdf"
```

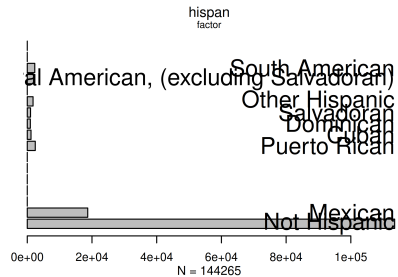
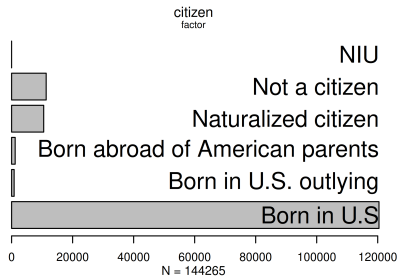
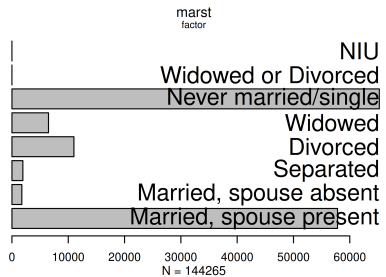
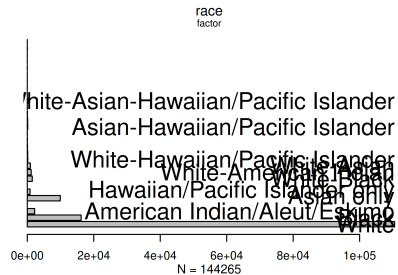
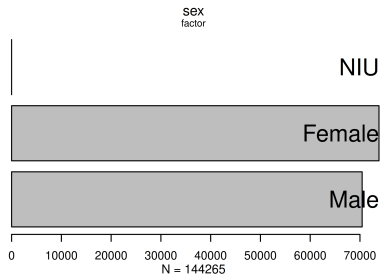
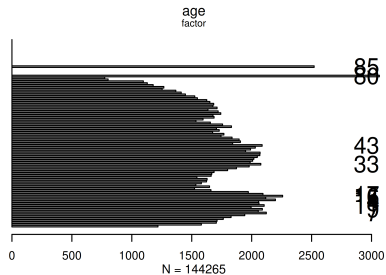
```
system.time({  
  file <- paste0("/tmp/tmp",paste0(sample(letters,16,T), collapse = ''), '.pdf')  
  raster_pdf(file, width = 12, height = 6, res = 600)  
  print(xqplot(dd, mfrow = c(2,3)))  
  dev.off()  
}  
)
```

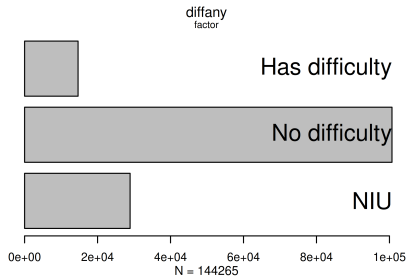
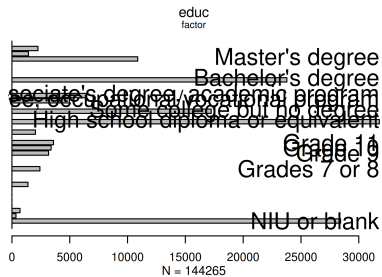
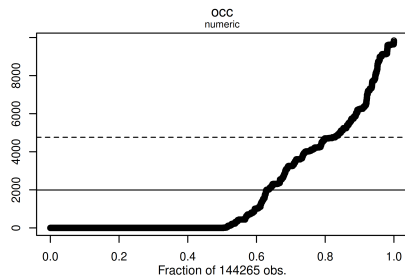
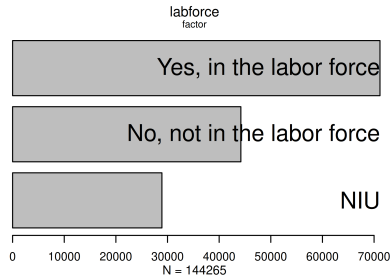
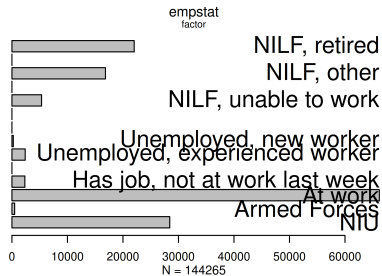
```
## [1] 0
```

```
##      user  system elapsed  
## 17.239   0.316  17.549
```









3 BUGS

- 2025-07-18: R version 4.5.1 (2025-06-13),
 - `as.data.frame.matrix` has methods in different packages some of which produce weird results. Can use: `base::as.data.frame.matrix` explicitly.

4 lme classes

random: `list(id = pdBlocked(list(pdIdent(control-1),pdSymm(patient+years__post-1)) list(id = pdBlocked(list(pdIdent(~ 0 + control),pdSymm(~ 0 + patient + years__post))`

weights: `weights=varIdent(form = ~1 | gender)`

correlation: `correlation = corCompSymm(form = ~ 1 | id)`

SOMETHING ABOUT HAVING INTEGERS FROM 1 to ...

5 Colorize

```
library(colorize)
```

This should be red and this should be cyan.

works in pdf but not html

Is this huge?

This should be red and this should be
cyan.

works in pdf but not html

Is this bold?

This should be red and this should be cyan.

Is this normal?

This should be red and this should be

cyan.