Examples with {huxtable}

November 23, 2021

Print a plain dataframe

```
df <- penguins %>%
  head(n =10)

x <- df %>% huxtable()

width(x) <-  0.8

x
```

species	island	bill_length_mm	bill_depth_mm	flipper_length_mm	body_mass_g	sex	year
Adelie	Torgersen	39.1	18.7	181	3750	male	2007
Adelie	Torgersen	39.5	17.4	186	3800	female	2007
Adelie	Torgersen	40.3	18	195	3250	female	2007
Adelie	Torgersen						2007
Adelie	Torgersen	36.7	19.3	193	3450	female	2007
Adelie	Torgersen	39.3	20.6	190	3650	male	2007
Adelie	Torgersen	38.9	17.8	181	3625	female	2007
Adelie	Torgersen	39.2	19.6	195	4675	male	2007
Adelie	Torgersen	34.1	18.1	193	3475		2007
Adelie	Torgersen	42	20.2	190	4250		2007

{gtsummary} Example: Default Print Engine

Example where we don't specify print engine:

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels()
```

```
## Table printed with `knitr::kable()`, not {gt}. Learn why at
## http://www.danieldsjoberg.com/gtsummary/articles/rmarkdown.html
## To suppress this message, include `message = FALSE` in code chunk header.
```

Characteristic	**N = 344**
Species	
Adelie	152 (44%)
Chinstrap	68 (20%)
Gentoo	124 (36%)
Island	
Biscoe	168 (49%)
Dream	124 (36%)
Torgersen	52 (15%)
Bill Length Mm	44.5 (39.2, 48.5)
Unknown	2
Bill Depth Mm	17.30 (15.60, 18.70)
Unknown	2
Flipper Length Mm	197 (190, 213)
Unknown	2
Body Mass G	4,050 (3,550, 4,750)
Unknown	2
Sex	
female	165 (50%)
male	168 (50%)
Unknown	11
Year	
2007	110 (32%)
2008	114 (33%)
2009	120 (35%)

{gtsummary} Example: Specify Print Engine

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels() %>%
  as_hux_table()
```

{gtsummary} Example: With Compact Theme

```
theme_gtsummary_compact()
```

```
## Setting theme `Compact`
```

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels() %>%
  as_hux_table()
```

```
reset_gtsummary_theme()
```

{gtsummary} Example: Add Title

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels()  %>%
  as_hux_table() %>%
  set_caption("Title")
```

{gtsummary} Example: Highlight Specific Values

```
x <- penguins %>%
  tbl_summary(by = species) %>%
  add_p() %>%
  bold_labels() %>%
  italicize_levels() %>%
  as_hux_table()

x <- x %>%
  mutate(new_cond = parse_number(stat_1)) %>%
  mutate(p_val_numeric = parse_number(p.value))
```

```
## Warning: 2 parsing failures.
## row col expected                                                    actual
##  22  -- a number n (%); Median (IQR)
##  23  -- a number Pearson's Chi-squared test; Kruskal-Wallis rank sum test

## Warning: 3 parsing failures.
## row col expected                                                    actual
##   1  -- a number **p-value**
##  22  -- a number n (%); Median (IQR)
##  23  -- a number Pearson's Chi-squared test; Kruskal-Wallis rank sum test
```

```
x <- x %>%
  set_background_color(
    row = .$new_cond >= 50,
    col = "stat_1",
```

```
    value = "purple") %>%

  set_background_color(
    row = .$p_val_numeric <=  0.05,
    value = "red") %>%

  # have to de-select new column made for calculating
  select(-c(new_cond, p_val_numeric))


width(x) <-  0.9

x
```

{gtsummary} Example: Merged Tables with Spanning Headers

```
sum <- penguins %>%
  select(species, island, sex) %>%
  tbl_summary(by = species) %>%
  add_p()


reg <- glm(species ~ island + sex,
           family = binomial(), data = penguins) %>%
  tbl_regression(exponentiate = TRUE)
```

```
## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

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## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred
```

```
reg2 <- penguins %>%
  # species limited to certain islands
  select(-island) %>%
  tbl_uvregression(
  method = glm,
  y = species,
  exponentiate = TRUE,
  method.args = list(family = binomial())
)

x <- tbl_merge(list(sum, reg, reg2),
          tab_spanner =
            c("**Summary Statistics**", "**Univariate***",
              "**Multivariate***")) %>%

  as_hux_table()


x
```

Add Footnotes

Couldn't specify position of footnote

```
x <- penguins %>%
  head(n = 10) %>%
  hux()

x %>%
  add_footnote(.,
               text = "Custom Footnote")
```

Saving Quickly

print objects to a PDF, TeX, HTML, Microsoft Office or RTF

```
huxtable::quick_pdf(x,
                    here::here("outputs",
                               "hux-quick-table.pdf"))


#huxtable::quick_latex()
#huxtable::quick_pdf()
#huxtable::quick_docx()
```

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Species	
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Torgersen	52 (15%)
Bill Length Mm	44.5 (39.2, 48.5)
Unknown	2
Bill Depth Mm	17.30 (15.60, 18.70)
Unknown	2
Flipper Length Mm	197 (190, 213)
Unknown	2
Body Mass G	4,050 (3,550, 4,750)
Unknown	2
Sex	
female	165 (50%)
male	168 (50%)
Unknown	11
Year	
2007	110 (32%)
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n (%); Median (IQR)

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Unknown	2
Sex	
female	165 (50%)
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Unknown	11
Year	
2007	110 (32%)
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2009	120 (35%)

n (%); Median (IQR)

Table 2: Title

Characteristic	**N = 344**
Species	
Adelie	152 (44%)
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Sex	
female	165 (50%)
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Unknown	11
Year	
2007	110 (32%)
2008	114 (33%)
2009	120 (35%)

n (%); Median (IQR)

Characteristic	**Adelie**, N = 152	**Chinstrap**, N = 68	**Gentoo**, N = 124	**p-value**
Island				<0.001
Biscoe	44 (29%)	0 (0%)	124 (100%)	
Dream	56 (37%)	68 (100%)	0 (0%)	
Torgersen	52 (34%)	0 (0%)	0 (0%)	
Bill Length Mm	38.8 (36.8, 40.8)	49.5 (46.3, 51.1)	47.3 (45.3, 49.5)	<0.001
Unknown	1	0	1	
Bill Depth Mm	18.40 (17.50, 19.00)	18.45 (17.50, 19.40)	15.00 (14.20, 15.70)	<0.001
Unknown	1	0	1	
Flipper Length Mm	190 (186, 195)	196 (191, 201)	216 (212, 221)	<0.001
Unknown	1	0	1	
Body Mass G	3,700 (3,350, 4,000)	3,700 (3,488, 3,950)	5,000 (4,700, 5,500)	<0.001
Unknown	1	0	1	
Sex				>0.9
female	73 (50%)	34 (50%)	58 (49%)	
male	73 (50%)	34 (50%)	61 (51%)	
Unknown	6	0	5	
Year				0.5
2007	50 (33%)	26 (38%)	34 (27%)	
2008	50 (33%)	18 (26%)	46 (37%)	
2009	52 (34%)	24 (35%)	44 (35%)	

n (%); Median (IQR)

Pearson's Chi-squared test; Kruskal-Wallis rank sum test

Summary Statistics				Univariate*				Mul
Adelie, N = 152	**Chinstrap**, N = 68	**Gentoo**, N = 124	**p-value**	**OR**	**95% CI**	**p-value**	**N**	**OR**
			<0.001					
44 (29%)	0 (0%)	124 (100%)		—	—			—
56 (37%)	68 (100%)	0 (0%)		0.46	0.28, 0.75	0.002		
52 (34%)	0 (0%)	0 (0%)		0.00	0.00, 758,956,969	>0.9		
			>0.9				333	
73 (50%)	34 (50%)	58 (49%)		—	—			—
73 (50%)	34 (50%)	61 (51%)		1.01	0.61, 1.66	>0.9		1.03
6	0	5						
							342	3.29
							342	0.48
							342	1.21
							342	1.00
							344	1.04

test

= Confidence Interval

species	island	bill_length_mm	bill_depth_mm	flipper_length_mm	body_mass_g	sex	year
Adelie	Torgersen	39.1	18.7	181	3750	male	2007
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Adelie	Torgersen	39.2	19.6	195	4675	male	2007
Adelie	Torgersen	34.1	18.1	193	3475		2007
Adelie	Torgersen	42	20.2	190	4250		2007

Custom Footnote