

Examples with {huxtable}

November 23, 2021

Print a plain dataframe

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

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.danielsjoberg.com/gtsummary/articles/rmarkdown.html  
## To suppress this message, include 'message = FALSE' in code chunk header.
```

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

{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)
```

[illegible]

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

```
## 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()  
  
# another spanner  
  
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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Flipper Length Mm	197 (190, 213)
<i>Unknown</i>	2
Body Mass G	4,050 (3,550, 4,750)
<i>Unknown</i>	2
Sex	
<i>female</i>	165 (50%)
<i>male</i>	168 (50%)
<i>Unknown</i>	11
Year	
<i>2007</i>	110 (32%)
<i>2008</i>	114 (33%)
<i>2009</i>	120 (35%)

n (%); Median (IQR)

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<i>female</i>	165 (50%)
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<i>Unknown</i>	11
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n (%); Median (IQR)

Table 2: Title

Characteristic	N = 344
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Year	
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<i>2009</i>	120 (35%)

n (%); Median (IQR)

Characteristic	Adelie, N = 152	Chinstrap, N = 68	Gentoo, N = 124	p-value
Island				<0.001
<i>Biscoe</i>	44 (29%)	0 (0%)	124 (100%)	
<i>Dream</i>	56 (37%)	68 (100%)	0 (0%)	
<i>Torgersen</i>	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
<i>Unknown</i>	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
<i>Unknown</i>	1	0	1	
Flipper Length Mm	190 (186, 195)	196 (191, 201)	216 (212, 221)	<0.001
<i>Unknown</i>	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
<i>Unknown</i>	1	0	1	
Sex				>0.9
<i>female</i>	73 (50%)	34 (50%)	58 (49%)	
<i>male</i>	73 (50%)	34 (50%)	61 (51%)	
<i>Unknown</i>	6	0	5	
Year				0.5
<i>2007</i>	50 (33%)	26 (38%)	34 (27%)	
<i>2008</i>	50 (33%)	18 (26%)	46 (37%)	
<i>2009</i>	52 (34%)	24 (35%)	44 (35%)	

n (%); Median (IQR)

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

Summary Statistics					Univariate*		Multivariate*	
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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Custom Footnote