

# Examples with {flextable}

November 22, 2021

## Print a Plain Dataframe

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

```
## Warning: Warning: fonts used in 'flextable' are ignored because the 'pdflatex'  
## engine is used and not 'xelatex' or 'lualatex'. You can avoid this warning  
## by using the 'set_flextable_defaults(fonts_ignore=TRUE)' command or use a  
## compatible engine by defining 'latex_engine: xelatex' in the YAML header of the  
## R Markdown document.
```

species	island	bill_length	bill_depth	flipper_length	body_mass	sex	year
Adelie	Torgersen	39.1	18.7	181	3,750	male	2,007
Adelie	Torgersen	39.5	17.4	186	3,800	female	2,007
Adelie	Torgersen	40.3	18.0	195	3,250	female	2,007
Adelie	Torgersen						2,007
Adelie	Torgersen	36.7	19.3	193	3,450	female	2,007
Adelie	Torgersen	39.3	20.6	190	3,650	male	2,007
Adelie	Torgersen	38.9	17.8	181	3,625	female	2,007
Adelie	Torgersen	39.2	19.6	195	4,675	male	2,007
Adelie	Torgersen	34.1	18.1	193	3,475		2,007
Adelie	Torgersen	42.0	20.2	190	4,250		2,007

## {gtsummary} Examples

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

## Specify Print Engine

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

## Warning: Warning: fonts used in ‘flextable’ are ignored because the ‘pdflatex’  
 ## engine is used and not ‘xelatex’ or ‘lualatex’. You can avoid this warning  
 ## by using the ‘set\_flextable\_defaults(fonts\_ignore=TRUE)’ command or use a  
 ## compatible engine by defining ‘latex\_engine: xelatex’ in the YAML header of the  
 ## R Markdown document.

Characteristic	N = 344 <sup>1</sup>
<b>Species</b>	
<i>Adelie</i>	152 (44%)
<i>Chinstrap</i>	68 (20%)
<i>Gentoo</i>	124 (36%)
<b>Island</b>	
<i>Biscoe</i>	168 (49%)
<i>Dream</i>	124 (36%)
<i>Torgersen</i>	52 (15%)
<b>Bill Length Mm</b>	44.5 (39.2, 48.5)
<i>Unknown</i>	2
<b>Bill Depth Mm</b>	17.30 (15.60, 18.70)
<i>Unknown</i>	2
<b>Flipper Length Mm</b>	197 (190, 213)
<i>Unknown</i>	2
<b>Body Mass G</b>	4,050 (3,550, 4,750)
<i>Unknown</i>	2
<b>Sex</b>	
<i>female</i>	165 (50%)
<i>male</i>	168 (50%)
<i>Unknown</i>	11
<b>Year</b>	
<i>2007</i>	110 (32%)
<i>2008</i>	114 (33%)
<i>2009</i>	120 (35%)

<sup>1</sup>n (%); Median (IQR)

## With Compact Theme

```
theme_gtsummary_compact()
```

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

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

```
## Warning: Warning: fonts used in 'flextable' are ignored because the 'pdflatex'
## engine is used and not 'xelatex' or 'lualatex'. You can avoid this warning
## by using the 'set_flextable_defaults(fonts_ignore=TRUE)' command or use a
## compatible engine by defining 'latex_engine: xelatex' in the YAML header of the
## R Markdown document.
```

Characteristic	N = 344 <sup>1</sup>
<b>Species</b>	
<i>Adelie</i>	152 (44%)
<i>Chinstrap</i>	68 (20%)
<i>Gentoo</i>	124 (36%)
<b>Island</b>	
<i>Biscoe</i>	168 (49%)
<i>Dream</i>	124 (36%)
<i>Torgersen</i>	52 (15%)
<b>Bill Length Mm</b>	44.5 (39.2, 48.5)
<i>Unknown</i>	2
<b>Bill Depth Mm</b>	17.30 (15.60, 18.70)
<i>Unknown</i>	2
<b>Flipper Length Mm</b>	197 (190, 213)
<i>Unknown</i>	2
<b>Body Mass G</b>	4,050 (3,550, 4,750)
<i>Unknown</i>	2
<b>Sex</b>	
<i>female</i>	165 (50%)
<i>male</i>	168 (50%)
<i>Unknown</i>	11
<b>Year</b>	
<i>2007</i>	110 (32%)
<i>2008</i>	114 (33%)
<i>2009</i>	120 (35%)

<sup>1</sup>n (%); Median (IQR)

Characteristic	N = 344 <sup>1</sup>
<sup>1</sup> n (%); Median (IQR)	

```
reset_gtsummary_theme()
```

## Add Header

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels() %>%
  as_flex_table() %>%
  add_header_row(values = "Title", colwidths = 2)
```

```
## Warning: Warning: fonts used in 'flextable' are ignored because the 'pdflatex'
## engine is used and not 'xelatex' or 'lualatex'. You can avoid this warning
## by using the 'set_flextable_defaults(fonts_ignore=TRUE)' command or use a
## compatible engine by defining 'latex_engine: xelatex' in the YAML header of the
## R Markdown document.
```

Title	
Characteristic	N = 344 <sup>1</sup>
<b>Species</b>	
<i>Adelie</i>	152 (44%)
<i>Chinstrap</i>	68 (20%)
<i>Gentoo</i>	124 (36%)
<b>Island</b>	
<i>Biscoe</i>	168 (49%)
<i>Dream</i>	124 (36%)
<i>Torgersen</i>	52 (15%)
<b>Bill Length Mm</b>	44.5 (39.2, 48.5)
<i>Unknown</i>	2
<b>Bill Depth Mm</b>	17.30 (15.60, 18.70)
<i>Unknown</i>	2
<b>Flipper Length Mm</b>	197 (190, 213)
<i>Unknown</i>	2
<b>Body Mass G</b>	4,050 (3,550, 4,750)
<sup>1</sup> n (%); Median (IQR)	

Title	
Characteristic	N = 344 <sup>1</sup>
<i>Unknown</i>	2
<b>Sex</b>	
<i>female</i>	165 (50%)
<i>male</i>	168 (50%)
<i>Unknown</i>	11
<b>Year</b>	
<i>2007</i>	110 (32%)
<i>2008</i>	114 (33%)
<i>2009</i>	120 (35%)

<sup>1</sup>n (%); Median (IQR)

## Add Footnotes

```
x <- penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels() %>%
  as_flex_table() %>%
  footnote(., i = 1, j = 1,
           value = as_paragraph("Custom Footnote"))
```

## Highlight Specific Values

## 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)

reg <- reg %>%
  tbl_regression()
```

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

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



Summary Statistics					
Characteristic	Adelie, N = 152 <sup>1</sup>	Chinstrap, N = 68 <sup>1</sup>	Gentoo, N = 124 <sup>1</sup>	p-value <sup>2</sup>	log(OR)
Island				<0.001	
Biscoe	44 (29%)	0 (0%)	124 (100%)		—
Dream	56 (37%)	68 (100%)	0 (0%)		-0.73
Torgersen	52 (34%)	0 (0%)	0 (0%)		-20.00
Sex				>0.9	
female	73 (50%)	34 (50%)	58 (49%)		—
male	73 (50%)	34 (50%)	61 (51%)		0.01
Unknown	6	0	5		

<sup>1</sup>n (%)

<sup>2</sup>Pearson's Chi-squared test

<sup>3</sup>OR = Odds Ratio, CI = Confidence Interval

## Saving Quickly