

Addressing Confounding and Exposure Measurement Error Using Conditional Score Functions

Bryan S. Blette

Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 27599, U.S.A.

**email:* blette@live.unc.edu

and

Peter B. Gilbert

Department of Biostatistics, University of Washington and Fred Hutchinson Cancer Research Center, Seattle, Washington

**email:*

and

Michael G. Hudgens

Department of Biostatistics, University of North Carolina at Chapel Hill

**email:*

SUMMARY: The text of your summary. Should not exceed 225 words.

KEY WORDS: Causal inference.

This paper has been submitted for consideration for publication in *Biometrics*

1. Introduction

Your text comes here. Separate text sections with

2. Section title

Text with citations by Heagerty et al. (2000), (Pepe, 2003).

2.1 Subsection title

as required (Hoerl and Kennard, 1970; Zou and Hastie, 2005). Don't forget to give each section and subsection a unique label (see Sect. 2).

Paragraph headings. Use paragraph headings as needed.

2.2 Equations

Here is an equation:

$$f_X(x) = \left(\frac{\alpha}{\beta}\right) \left(\frac{x}{\beta}\right)^{\alpha-1} e^{-\left(\frac{x}{\beta}\right)^\alpha}; \alpha, \beta, x > 0$$

Here is another:

$$a^2 + b^2 = c^2 \tag{1}$$

Inline equations: $\sum_{i=2}^{\infty} \{\alpha_i^\beta\}$

3. Figures and tables

3.1 Figures coming from R

Normal figure embedded in text.

```
## Warning in plot.formula(runif(25) ~ runif(25)): the formula 'runif(25) ~
## runif(25)' is treated as 'runif(25) ~ 1'
```

[Figure 1 about here.]

3.2 Tables coming from R

```
print(xtable::xtable(head(mtcars)[,1:4],
caption = "Caption centered under table", label = "tab1"),
comment = FALSE, timestamp = FALSE, caption.placement = "top")
```

[Table 1 about here.]

Table 1 shows these numbers. Some of those numbers are plotted in Figure ??.

```
head(mtcars[,1:4])
```

##	mpg	cyl	disp	hp
## Mazda RX4	21.0	6	160	110
## Mazda RX4 Wag	21.0	6	160	110
## Datsun 710	22.8	4	108	93
## Hornet 4 Drive	21.4	6	258	110
## Hornet Sportabout	18.7	8	360	175
## Valiant	18.1	6	225	105

References

- Heagerty, P. J., Lumley, T., and Pepe, M. S. (2000). Time-dependent roc curves for censored survival data and a diagnostic marker. *Biometrics* **56**, 337–344.
- Hoerl, A. E. and Kennard, R. W. (1970). Ridge regression: Biased estimation for nonorthogonal problems. *Technometrics* **12**, 55–67.
- Pepe, M. S. (2003). *The statistical evaluation of medical tests for classification and prediction*. Oxford University Press.
- Zou, H. and Hastie, T. (2005). Regularization and variable selection via the elastic net. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)* **67**, 301–320.

Received Dec 2020

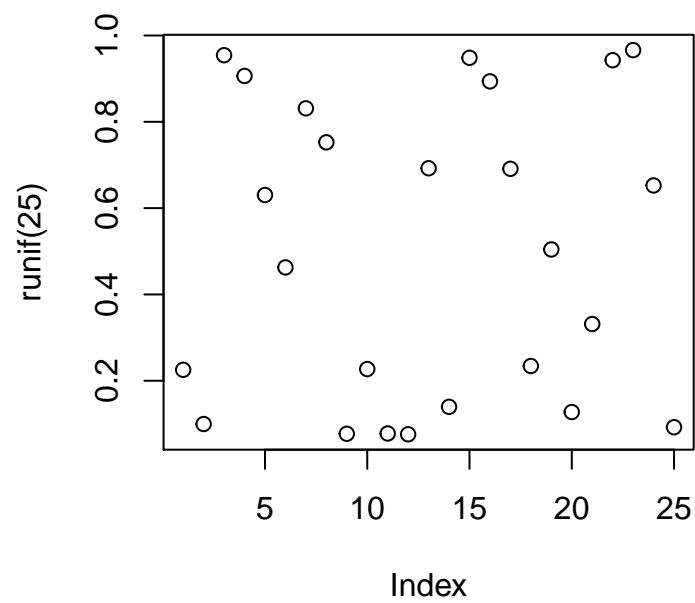


Figure 1. Output from `pdf()`

Table 1
Caption centered under table

	mpg	cyl	disp	hp
Mazda RX4	21.00	6.00	160.00	110.00
Mazda RX4 Wag	21.00	6.00	160.00	110.00
Datsun 710	22.80	4.00	108.00	93.00
Hornet 4 Drive	21.40	6.00	258.00	110.00
Hornet Sportabout	18.70	8.00	360.00	175.00
Valiant	18.10	6.00	225.00	105.00