Mediation Analysis with Logistic Regression

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R ───

```r
set.seed(42)
dat <- R.rspss("data/heart.sav", vlabs = TRUE)
library(mediation)
dat <- na.omit(dat)
# dat$w1neg.d <- sapply(dat$w1neg, R.dich)
treatment <- c("w1neg")
mediators <- c("w1cesd9")
outcome <- c("w1hheart")
datasets <- list(dat = dat)
m.model <- mediations(datasets, treatment, mediators, outcome,
                      families = c("gaussian", "binomial"),
                      interaction = FALSE,
                      conf.level = .95, sims = 50)
summary(m.model)
```
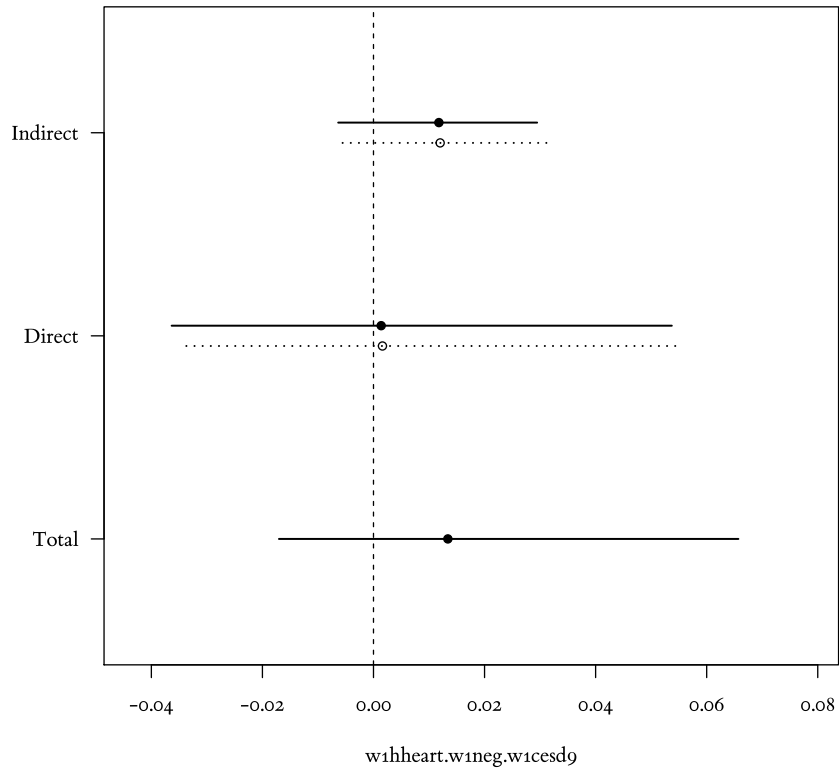
Specification w1hheart.w1neg.w1cesd9
Causal Mediation Analysis
Quasi-Bayesian Confidence Intervals

```
                  Estimate 95% CI Lower 95% CI Upper p-value
```

ACME (control) 0.01201 -0.00557 0.03188 0.16
ACME (treated) 0.01178 -0.00636 0.02947 0.16
ADE (control) 0.00161 -0.03371 0.05441 0.96
ADE (treated) 0.00138 -0.03635 0.05372 0.96
Total Effect 0.01339 -0.01702 0.06571 0.60
Prop. Mediated (control) 0.33883 -2.48435 6.35319 0.68
Prop. Mediated (treated) 0.36748 -2.43597 6.07749 0.68
ACME (average) 0.01189 -0.00596 0.03068 0.16
ADE (average) 0.00150 -0.03503 0.05407 0.96
Prop. Mediated (average) 0.35316 -2.45413 6.21534 0.68
Sample Size Used: 692
Simulations: 50

```r
plot.mediations(m.model, labels = c("Indirect", "Direct", "Total"))
```

w1hheart.w1neg.w1cesd9

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[1] **Note:** This document was created using *R-v3.3.2* R Core Team, *R*, and the following *R-packages*: *base-v3.3.* R Core Team, *R*, *bibtex-v0.4.* Francois, *Bibtex*, *dplyr-v0.5.* Wickham and Francois, *Dplyr*, *DT-v0.2.* Xie, *DT*, *extrafont-v0.17.* Chang, *Extrafont*, *ggplot2-v2.1.* Wickham, *Ggplot2*, *knitcitations-v1.0.* Boettiger, *knitcitations*, *knitr-v1.14.* Xie, *Dynamic Documents with R and Knitr*, *pander-v0.6.* Daroczi and Tsegelskyi, *Pander*, *papaja-v0.1.* Aust and Barth, *Papaja*, *plyr-v1.8.* Wickham, "The Split-Apply-Combine Strategy for Data Analysis.", *rmarkdown-v1.1.* Allaire et al., *rmarkdown*, *scales-v0.4.* Wickham, *Scales*, *tidyr-v0.6.* Wickham, *Tidyr*, *ggthemes-v3.2.* Arnold, *Ggthemes*, *gtable-v0.2.* Wickham, *Gtable*, *kableExtra-v0.0.* Zhu, *KableExtra*, *tufte-v0.2.* Xie and Allaire, *Tufte*, *MASS-v7.3.* Venables and Ripley, *Modern Applied Statistics with S*, *devtools-v1.12.* Wickham and Chang, *Devtools*, *highlight-v0.4.* Francois, *Highlight*, *sysfonts-v0.5.* Qiu and others, *Sysfonts*, and *showtext-v0.4.* Qiu, *Showtext*

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