

PathDiagrams

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```
require(tidyverse)
```

```
## Loading required package: tidyverse
```

```
## -- Attaching packages ----- tidyverse 1.3.0 --
```

```
## v ggplot2 3.3.2      v purrr  0.3.4
```

```
## v tibble  3.0.4      v dplyr  1.0.2
```

```
## v tidyr   1.1.2      v stringr 1.4.0
```

```
## v readr   1.3.1      v forcats 0.5.0
```

```
## -- Conflicts ----- tidyverse_conflicts() --
```

```
## x dplyr::filter() masks stats::filter()
```

```
## x dplyr::lag()    masks stats::lag()
```

```
require(lavaan)
```

```
## Loading required package: lavaan
```

```
## This is lavaan 0.6-7
```

```
## lavaan is BETA software! Please report any bugs.
```

```
require(flexplavaan)
```

```
## Loading required package: flexplavaan
```

```
## Registered S3 method overwritten by 'GGally':
```

```
##   method from
```

```
##   +.gg      ggplot2
```

```
## Warning: replacing previous import 'flexplot::flip_data' by 'ggplot2::flip_data'
```

```
## when loading 'flexplavaan'
```

```
fit_o = fitMeasures(force_fit$lavaan) %>% round(digits=3)
```

```
fit_n = fitMeasures(nonlinear$lavaan) %>% round(digits=3)
```

```
measures = c("chisq", "df", "pvalue", "cfi", "tli", "bic", "rmsea", "srmr")
```

```
tab = data.frame(Original=fit_o[measures], Nonlinear=fit_n[measures])
```

```
row.names(tab) = c("$\\chi^2$", "$df$", "$p$", "CFI", "TLI", "BIC", "RMSEA", "SRMR")
```

```
knitr::kable(tab, row.names=T, caption="Global Fit Indices for the Original and Nonlinear Model for the Jedi Dataset")
```

Table 1: Global Fit Indices for the Original and Nonlinear Model for the Jedi Dataset.

	Original	Nonlinear
χ^2	19.445	26.340
df	13.000	31.000
p	0.110	0.705

	Original	Nonlinear
CFI	0.996	1.000
TLI	0.994	1.004
BIC	42616.177	50388.554
RMSEA	0.026	0.000
SRMR	0.025	0.022

R Markdown

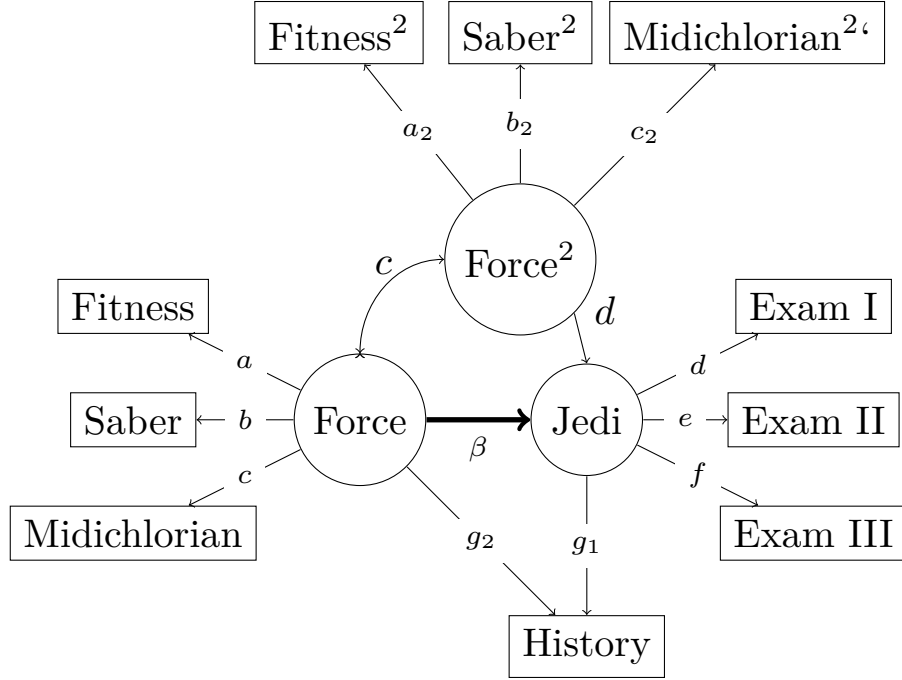
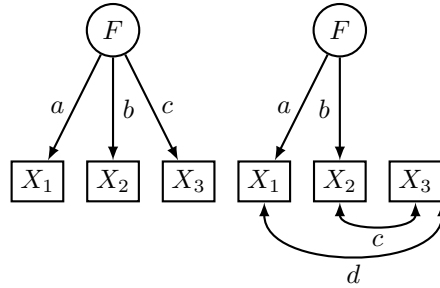


Figure 1: Nonlinear model for the dataset generated from 2.



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When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

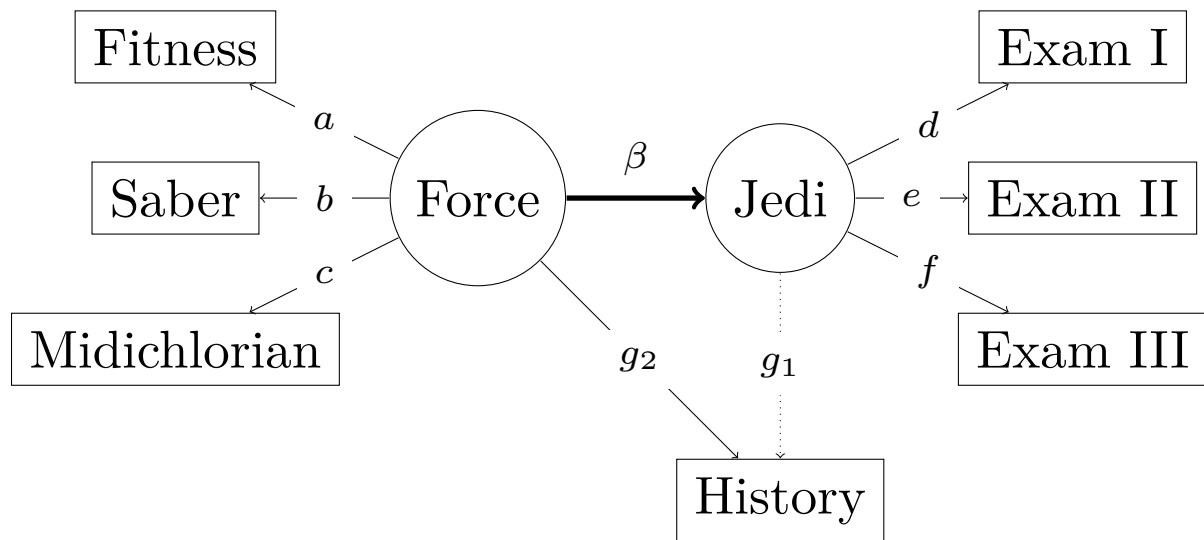


Figure 2: Model specified by the Jedi council. The incorrectly specified path is shown as a thicker line, while the missing path is shown as a dotted line.