Normality Test Transformed Survey Data

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```
> survey_data <-
+   readXL("I:/big survey paper/data for analysis of case survey.xlsx",
+   rownames=FALSE, header=TRUE, na="", sheet="Sheet3", stringsAsFactors=TRUE)
```

```
> survey_data$ln_temperature <- with(survey_data, log(temperature+1))
```

```
> survey_data$ln_RH <- with(survey_data, log(RH+1))
```

```
> survey_data$ln_PMI <- with(survey_data, log(abs_val_PMI+1))
```

```
> with(survey_data, shapiro.test(ln_temperature))
```

```

    Shapiro-Wilk normality test

data:  ln_temperature
W = 0.91515, p-value = 9.28e-09
```

```
> with(survey_data, shapiro.test(ln_RH))
```

```

    Shapiro-Wilk normality test

data:  ln_RH
W = 0.96641, p-value = 0.0004134
```

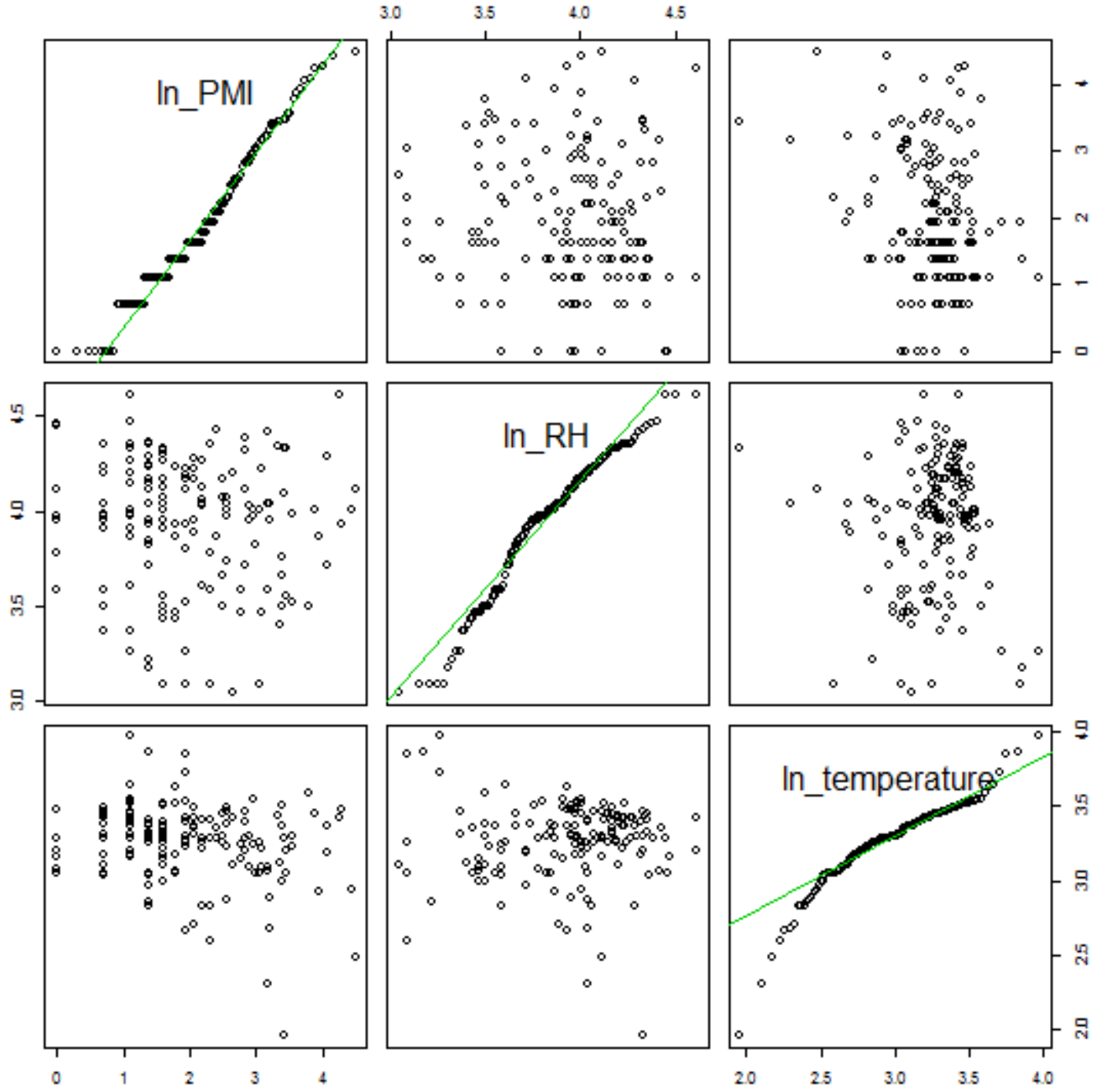
```
> with(survey_data, shapiro.test(ln_PMI))
```

```

    Shapiro-Wilk normality test

data:  ln_PMI
W = 0.97705, p-value = 0.004886
```

```
> scatterplotMatrix(~ln_PMI+ln_RH+ln_temperature, reg.line=FALSE,
+   smooth=FALSE, spread=TRUE, span=0.5, ellipse=FALSE, levels=c(.5, .9),
+   id.n=0, diagonal = 'qqplot', data=survey_data)
```


ln_PMI
ln_RH
ln_temperature
3.0
3.5
4.0
4.5
0
1
2
3
4
3.0
3.5
4.0
4.5
2.0
2.5
3.0
3.5
4.0