In [1]:
```
# Load the required packages
install.packages("psych")
install.packages("igraph")
install.packages("corrplot")
install.packages("ggplot2")

library(ggplot2)
library(psych)
library(igraph)
library(corrplot)


# Read the CSV file
data <- read.csv("Pilot_modified_data_1.csv")

# Calculate the correlation matrix
cor_matrix <- cor(data)

# Convert the correlation matrix to a data frame
cor_df <- as.data.frame(cor_matrix)

# Print and save the correlation data frame
cat("The Correlation Matrix is as follows\n\n")
print(cor_df)
write.csv(cor_df , "Correlation_matrix_Type_1.csv")




#Chi-Square tests


View(data)
names(data)


tab = table(data$PAQ, data$CBCL)
tab

tab2 = tab[1:3, 1:2]
tab2


chisq.test(tab2)


attach(data)
table(PAQ, BFI..E.)
chisq.test(table(PAQ, BFI..E.))


table(PAQ, BFI..A.)
chisq.test(table(PAQ, BFI..A.))
```

```
table(PAQ, BFI..C.)
chisq.test(table(PAQ, BFI..C.))


table(PAQ, BFI..N.)
chisq.test(table(PAQ, BFI..N.))


table(PAQ, BFI..O.)
chisq.test(table(PAQ, BFI..O.))


attach(data)
table(PAQ, EI..Self.A.)
chisq.test(table(PAQ, EI..Self.A.))

attach(data)
table(PAQ, EI..Self.M.)
chisq.test(table(PAQ, EI..Self.M.))

attach(data)
table(PAQ, EI..Social.A.)
chisq.test(table(PAQ, EI..Social.A.))

attach(data)
table(PAQ, EI..RM.)
chisq.test(table(PAQ, EI..RM.))

attach(data)
table(PAQ, Total)
chisq.test(table(PAQ, Total))

attach(data)
table(PAQ, CBCL)
chisq.test(table(PAQ, CBCL))

attach(data)
table(PAQ, Panas...1)
chisq.test(table(PAQ, Panas...1))

attach(data)
table(PAQ, Panas..)
chisq.test(table(PAQ, Panas..))
```

```
Updating HTML index of packages in '.Library'

Making 'packages.html' ...
 done

Updating HTML index of packages in '.Library'

Making 'packages.html' ...
 done

Updating HTML index of packages in '.Library'

Making 'packages.html' ...
 done

Updating HTML index of packages in '.Library'

Making 'packages.html' ...
 done


Attaching package: ‘psych’


The following objects are masked from ‘package:ggplot2’:

    %+%, alpha



Attaching package: ‘igraph’


The following objects are masked from ‘package:stats’:

    decompose, spectrum


The following object is masked from ‘package:base’:

    union


corrplot 0.92 loaded
```

The Correlation Matrix is as follows

	Panas..	Panas...1	BFI..E.	BFI..A.	BFI..C.
Panas..	1.00000000	-0.18463724	0.01732137	0.28246087	0.0000000
Panas...1	-0.18463724	1.00000000	-0.09381301	-0.06168610	0.0000000
BFI..E.	0.01732137	-0.09381301	1.00000000	0.19270572	0.2901007
BFI..A.	0.28246087	-0.06168610	0.19270572	1.00000000	0.1526030
BFI..C.	0.00000000	0.00000000	0.29010070	0.15260299	1.0000000
BFI..N.	0.27714199	0.09381301	0.00990099	-0.01562479	-0.2901007
BFI..O.	0.26967994	-0.42600643	0.06422937	0.24326546	0.1881932
EI..Self.A.	0.00000000	0.08003565	-0.01228645	-0.19389287	0.1058809
EI..Self.M.	-0.32202044	0.32477502	-0.21430575	-0.32089914	0.0000000
EI..Social.A.	-0.01580439	0.16954784	-0.03822023	-0.11368555	0.2443329
EI..RM.	-0.00630938	-0.09031108	-0.15404801	-0.29595235	0.1585055
Total	-0.17452344	0.29960206	-0.14251219	-0.22115068	0.2087816
PAQ	0.10361609	0.17267304	0.09567521	0.50088804	-0.1334905
CBCL	-0.47673129	0.20440745	-0.03633362	-0.10512007	0.0000000

	BFI..N.	BFI..O.	EI..Self.A.	EI..Self.M.	EI..Social.A.
Panas..	0.27714199	0.26967994	0.00000000	-0.3220204	-0.01580439
Panas...1	0.09381301	-0.42600643	0.08003565	0.3247750	0.16954784
BFI..E.	0.00990099	0.06422937	-0.01228645	-0.2143057	-0.03822023
BFI..A.	-0.01562479	0.24326546	-0.19389287	-0.3208991	-0.11368555
BFI..C.	-0.29010070	0.18819316	0.10588089	0.0000000	0.24433293
BFI..N.	1.00000000	-0.06422937	0.12900770	0.1307756	-0.08582179
BFI..O.	-0.06422937	1.00000000	-0.10361551	-0.4938162	-0.25785865
EI..Self.A.	0.12900770	-0.10361551	1.00000000	0.4209523	0.16211984
EI..Self.M.	0.13077564	-0.49381616	0.42095235	1.0000000	0.20500755
EI..Social.A.	-0.08582179	-0.25785865	0.16211984	0.2050076	1.00000000
EI..RM.	-0.04302010	-0.14271441	0.38584234	0.1797052	0.51400633
Total	-0.03919085	-0.41140265	0.31390489	0.6517499	0.68266343
PAQ	0.05922751	0.08275481	-0.19787726	-0.1259189	-0.10360414
CBCL	0.03633362	-0.16499158	-0.13526257	-0.1026390	0.11985565

	EI..RM.	Total	PAQ	CBCL
Panas..	-0.00630938	-0.17452344	0.10361609	-0.47673129
Panas...1	-0.09031108	0.29960206	0.17267304	0.20440745
BFI..E.	-0.15404801	-0.14251219	0.09567521	-0.03633362
BFI..A.	-0.29595235	-0.22115068	0.50088804	-0.10512007
BFI..C.	0.15850550	0.20878157	-0.13349047	0.00000000
BFI..N.	-0.04302010	-0.03919085	0.05922751	0.03633362
BFI..O.	-0.14271441	-0.41140265	0.08275481	-0.16499158
EI..Self.A.	0.38584234	0.31390489	-0.19787726	-0.13526257
EI..Self.M.	0.17970521	0.65174988	-0.12591887	-0.10263903
EI..Social.A.	0.51400633	0.68266343	-0.10360414	0.11985565
EI..RM.	1.00000000	0.50575787	-0.40966620	-0.05908333
Total	0.50575787	1.00000000	-0.01639432	-0.07844645
PAQ	-0.40966620	-0.01639432	1.00000000	0.06687598
CBCL	-0.05908333	-0.07844645	0.06687598	1.00000000

A data.frame: 34 × 14

Panas..	Panas...1	BFI..E.	BFI..A.	BFI..C.	BFI..N.	BFI..O.	EI..Self.A.	EI..Self.M.	EI..Social.A.	EI..RM
<int>	<int>	<int>	<int>	<int>	<int>	<int>	<int>	<int>	<int>	<int:
2	1	2	2	2	2	3	73	65	62	7
2	1	2	3	2	2	3	76	45	72	7
2	1	2	2	2	2	2	83	52	77	8
2	2	2	2	2	2	3	85	62	93	8
2	1	2	3	2	3	2	89	62	88	7
2	2	2	2	2	2	2	90	75	68	5
2	1	2	2	2	2	3	74	36	81	7
2	1	2	2	2	1	2	72	49	76	6
2	2	2	2	1	3	2	79	62	62	5
2	2	2	2	2	2	2	85	93	93	5
2	2	2	3	2	2	2	46	49	88	5
2	2	2	2	2	2	3	67	45	64	4
2	2	2	2	2	2	2	77	74	72	8
2	1	2	2	2	2	3	83	78	70	5
2	2	2	3	2	2	2	76	68	68	5
2	1	2	2	2	1	3	76	40	74	7
2	1	2	2	2	1	2	67	49	74	6
2	2	2	3	2	2	2	77	71	70	5
3	1	2	3	2	3	3	77	37	77	7
2	2	2	2	2	2	2	85	62	90	7
2	1	2	3	2	2	3	67	68	74	6
2	2	2	2	2	2	2	79	73	88	7
2	1	2	2	3	2	3	79	62	77	6
2	2	2	2	2	1	2	76	74	88	8
2	2	2	2	2	3	2	79	78	79	7
2	2	1	1	2	2	2	85	85	81	8
2	2	2	1	2	3	2	79	78	81	7
2	2	3	2	3	2	2	77	62	79	7
2	1	2	1	1	3	2	67	62	70	6
2	2	1	2	2	2	2	70	76	79	7
2	1	2	2	2	1	2	83	91	81	7

Panas..	Panas...1	BFI..E.	BFI..A.	BFI..C.	BFI..N.	BFI..O.	EI..Self.A.	EI..Self.M.	EI..Social.A.	EI..RM
<int>	<int>	<int>	<int>	<int>	<int>	<int>	<int>	<int>	<int>	<int>
2	2	2	2	2	2	2	85	80	81	7
2	1	2	2	2	3	2	79	96	77	8
2	1	2	1	2	2	2	76	73	90	7

'Panas..' · 'Panas...1' · 'BFI..E.' · 'BFI..A.' · 'BFI..C.' · 'BFI..N.' · 'BFI..O.' · 'EI..Self.A.' · 'EI..Self.M.' · 'EI..Social.A.' · 'EI..RM.' · 'Total' · 'PAQ' · 'CBCL'

```
   1  2
1  2 14
2  2 13
3  0  3

   1  2
1  2 14
2  2 13
3  0  3
```

```
Warning message in chisq.test(tab2):
“Chi-squared approximation may be incorrect”
```

```
        Pearson's Chi-squared test

data:  tab2
X-squared = 0.44389, df = 2, p-value = 0.801
```

```
   BFI..E.
PAQ  1  2  3
  1  2 13  1
  2  0 15  0
  3  0  3  0
```

```
Warning message in chisq.test(table(PAQ, BFI..E.)):
“Chi-squared approximation may be incorrect”
```

```
        Pearson's Chi-squared test

data:  table(PAQ, BFI..E.)
X-squared = 3.7016, df = 4, p-value = 0.4479
```

```
   BFI..A.
PAQ  1  2  3
  1  4 11  1
  2  0 11  4
  3  0  1  2
```

```
Warning message in chisq.test(table(PAQ, BFI..A.)):
“Chi-squared approximation may be incorrect”
```

```
        Pearson's Chi-squared test

data:  table(PAQ, BFI..A.)
X-squared = 10.057, df = 4, p-value = 0.03947
```

```
   BFI..C.
PAQ  1  2  3
  1  1 13  2
  2  1 14  0
  3  0  3  0
```

```
Warning message in chisq.test(table(PAQ, BFI..C.)):
“Chi-squared approximation may be incorrect”
        Pearson's Chi-squared test

data:  table(PAQ, BFI..C.)
X-squared = 2.6256, df = 4, p-value = 0.6223
   BFI..N.
PAQ  1  2  3
  1  4  8  4
  2  1 11  3
  3  0  3  0
Warning message in chisq.test(table(PAQ, BFI..N.)):
“Chi-squared approximation may be incorrect”
        Pearson's Chi-squared test

data:  table(PAQ, BFI..N.)
X-squared = 4.3096, df = 4, p-value = 0.3657
   BFI..O.
PAQ  2  3
  1 13  3
  2  8  7
  3  3  0
Warning message in chisq.test(table(PAQ, BFI..O.)):
“Chi-squared approximation may be incorrect”
        Pearson's Chi-squared test

data:  table(PAQ, BFI..O.)
X-squared = 4.2772, df = 2, p-value = 0.1178
The following objects are masked from data (pos = 3):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


   EI..Self.A.
PAQ 46 67 70 72 73 74 76 77 79 83 85 89 90
  1  0  1  1  1  1  0  3  2  3  1  2  1  0
  2  0  3  0  0  0  1  1  2  3  2  2  0  1
  3  1  0  0  0  0  0  1  0  0  0  1  0  0
Warning message in chisq.test(table(PAQ, EI..Self.A.)):
“Chi-squared approximation may be incorrect”
        Pearson's Chi-squared test

data:  table(PAQ, EI..Self.A.)
X-squared = 23.033, df = 24, p-value = 0.5179
```

```
The following objects are masked from data (pos = 3):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 4):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total
```

```
   EI..Self.M.
PAQ 36 37 40 45 49 52 62 65 68 71 73 74 75 76 78 80 85 91 93 96
  1  0  0  1  0  1  0  5  1  0  0  1  2  0  1  2  0  1  1  0  0
  2  1  1  0  2  1  1  2  0  1  1  1  0  1  0  1  0  0  0  1  1
  3  0  0  0  0  1  0  0  0  1  0  0  0  0  0  0  1  0  0  0  0
```

```
Warning message in chisq.test(table(PAQ, EI..Self.M.)):
“Chi-squared approximation may be incorrect”
```

```
        Pearson's Chi-squared test

data:  table(PAQ, EI..Self.M.)
X-squared = 39.319, df = 38, p-value = 0.4106
```

```
The following objects are masked from data (pos = 3):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 4):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 5):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total
```

```
   EI..Social.A.
PAQ 62 64 68 70 72 74 76 77 79 81 88 90 93
  1  1  0  0  1  1  1  1  1  3  3  2  2  0
  2  1  1  1  2  1  2  0  3  0  1  1  0  2
  3  0  0  1  0  0  0  0  0  0  1  1  0  0
```

```
Warning message in chisq.test(table(PAQ, EI..Social.A.)):
“Chi-squared approximation may be incorrect”
```

```
        Pearson's Chi-squared test

data:  table(PAQ, EI..Social.A.)
X-squared = 21.904, df = 24, p-value = 0.585
```

```
The following objects are masked from data (pos = 3):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 4):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 5):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 6):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total
```

```
   EI..RM.
PAQ 43 53 56 59 61 65 67 70 75 77 78 80 83 86 89
  1  0  0  0  0  0  1  2  3  1  4  2  0  1  2  0
  2  1  2  1  2  1  1  0  1  2  0  1  1  0  0  2
  3  0  1  1  0  0  0  0  0  0  1  0  0  0  0  0
```

```
Warning message in chisq.test(table(PAQ, EI..RM.)):
“Chi-squared approximation may be incorrect”
        Pearson's Chi-squared test

data:  table(PAQ, EI..RM.)
X-squared = 30.022, df = 28, p-value = 0.3622
```

```
The following objects are masked from data (pos = 3):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 4):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 5):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 6):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 7):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total
```

```
   Total
PAQ 1 2 3 4
  1 0 4 9 3
  2 1 7 4 3
  3 0 1 0 2
```

```
Warning message in chisq.test(table(PAQ, Total)):
“Chi-squared approximation may be incorrect”
```

```
        Pearson's Chi-squared test

data:  table(PAQ, Total)
X-squared = 7.9374, df = 6, p-value = 0.2427
```

```
The following objects are masked from data (pos = 3):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 4):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 5):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 6):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 7):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 8):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total
```

```
   CBCL
PAQ  1  2
  1  2 14
  2  2 13
  3  0  3
```

```
Warning message in chisq.test(table(PAQ, CBCL)):
“Chi-squared approximation may be incorrect”
```

```
        Pearson's Chi-squared test

data:  table(PAQ, CBCL)
X-squared = 0.44389, df = 2, p-value = 0.801
```

```
The following objects are masked from data (pos = 3):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 4):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 5):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 6):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 7):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 8):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 9):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total
```

```
   Panas...1
PAQ 1 2
  1 8 8
  2 8 7
  3 0 3
```

```
Warning message in chisq.test(table(PAQ, Panas...1)):
“Chi-squared approximation may be incorrect”
        Pearson's Chi-squared test

data:  table(PAQ, Panas...1)
X-squared = 2.9593, df = 2, p-value = 0.2277
```

```
The following objects are masked from data (pos = 3):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 4):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 5):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 6):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 7):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 8):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 9):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total


The following objects are masked from data (pos = 10):

    BFI..A., BFI..C., BFI..E., BFI..N., BFI..O., CBCL, EI..RM.,
    EI..Self.A., EI..Self.M., EI..Social.A., Panas.., Panas...1, PAQ,
    Total
```

```
   Panas..
PAQ  2  3
  1 16  0
  2 14  1
  3  3  0
```

```
Warning message in chisq.test(table(PAQ, Panas..)):
“Chi-squared approximation may be incorrect”
```

```
        Pearson's Chi-squared test

data:  table(PAQ, Panas..)
```