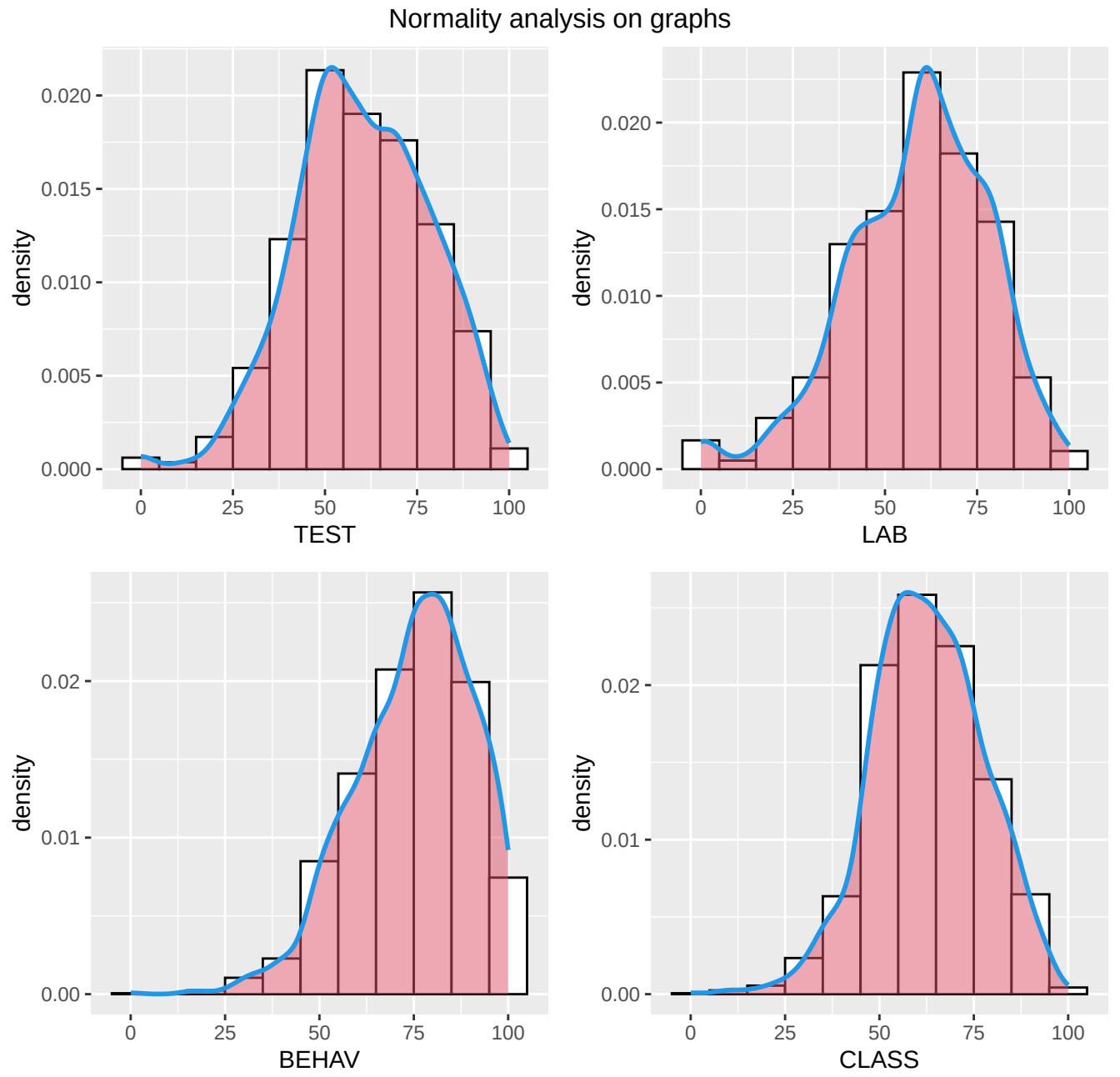


Figure 1: Histograms with kernel density estimate for variables TEST, LAB, BEHAV and CLASS

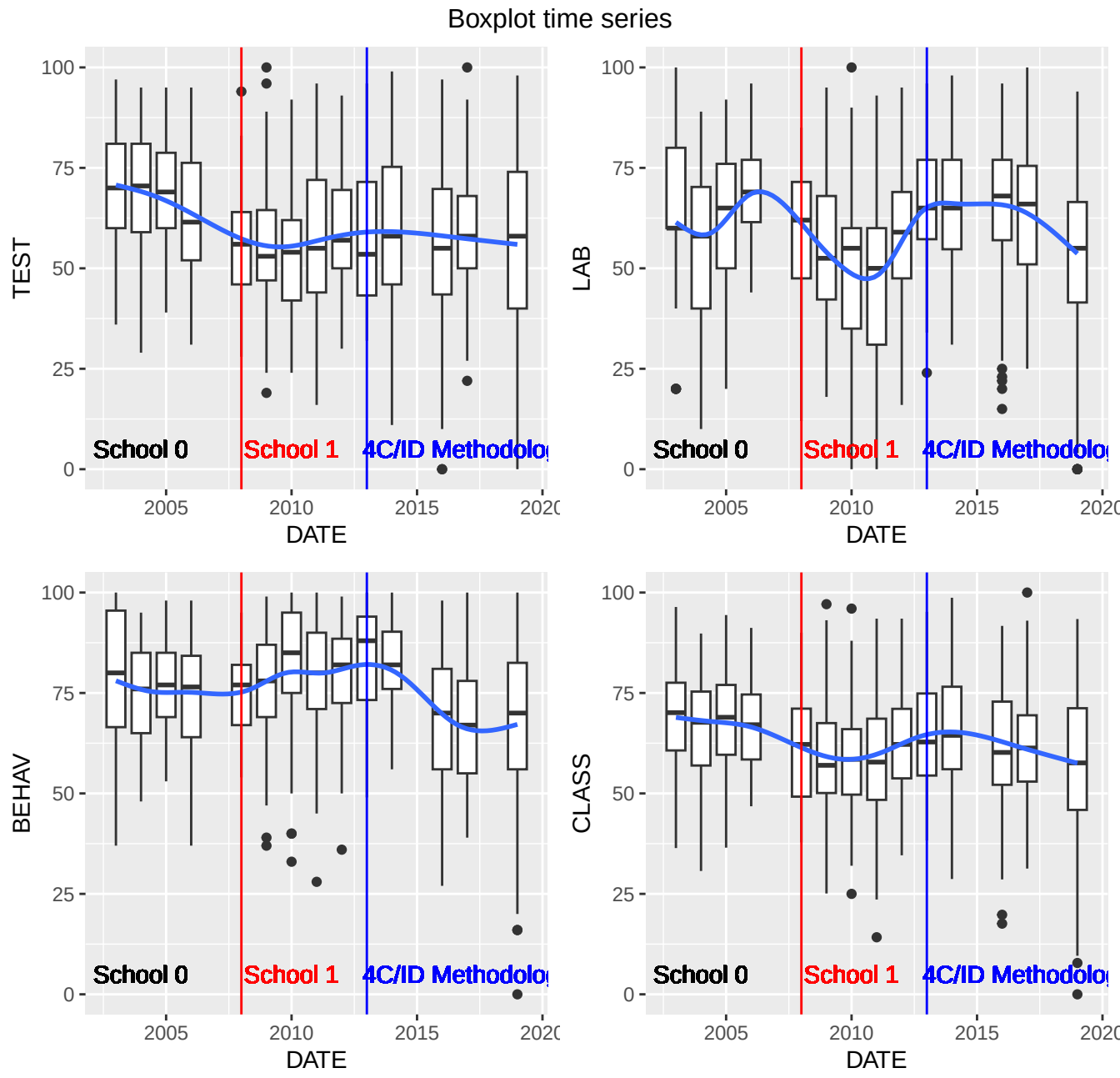


Figure 2: all data sample

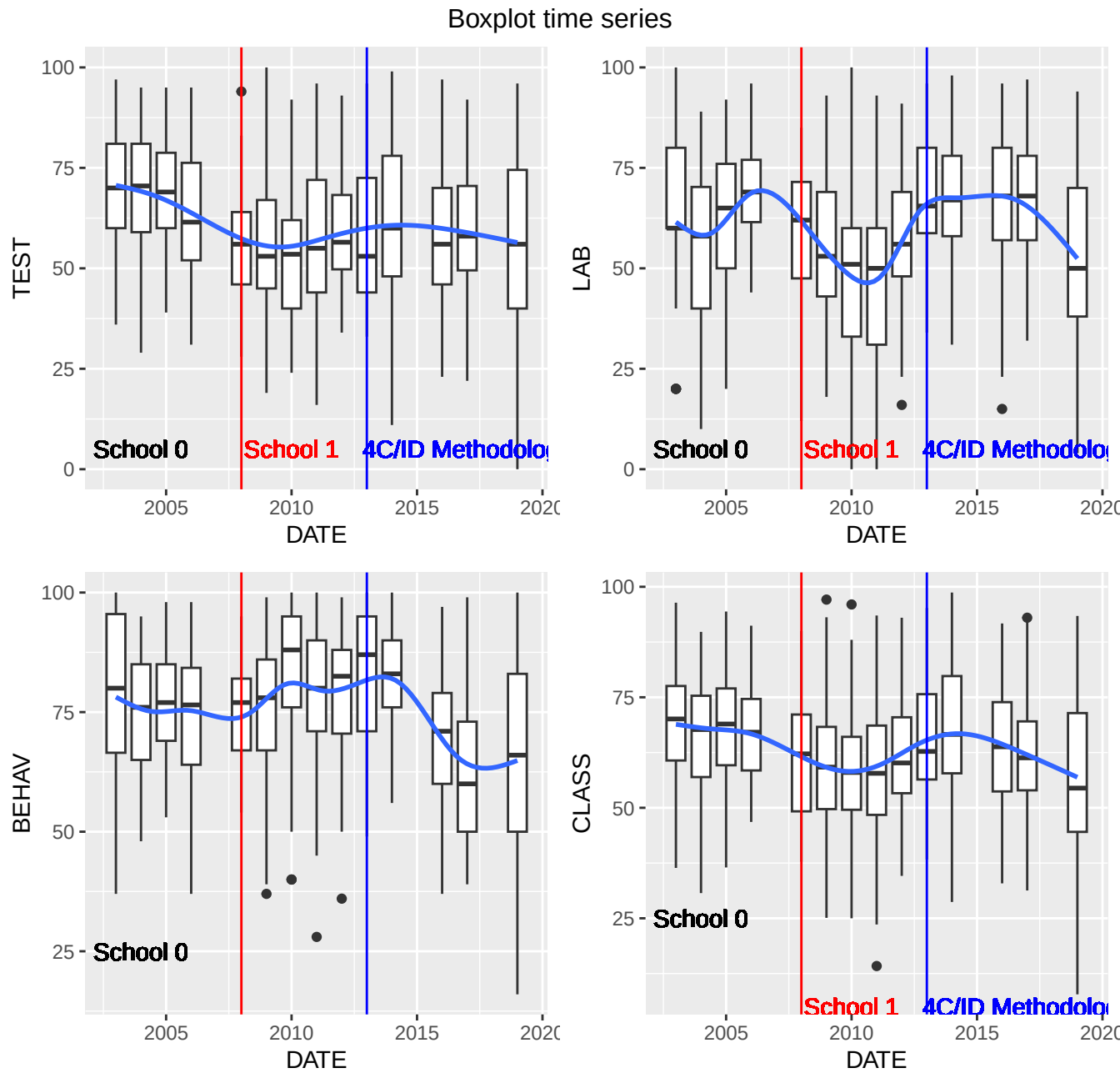


Figure 3: data sample junior grade for school 0 and 1

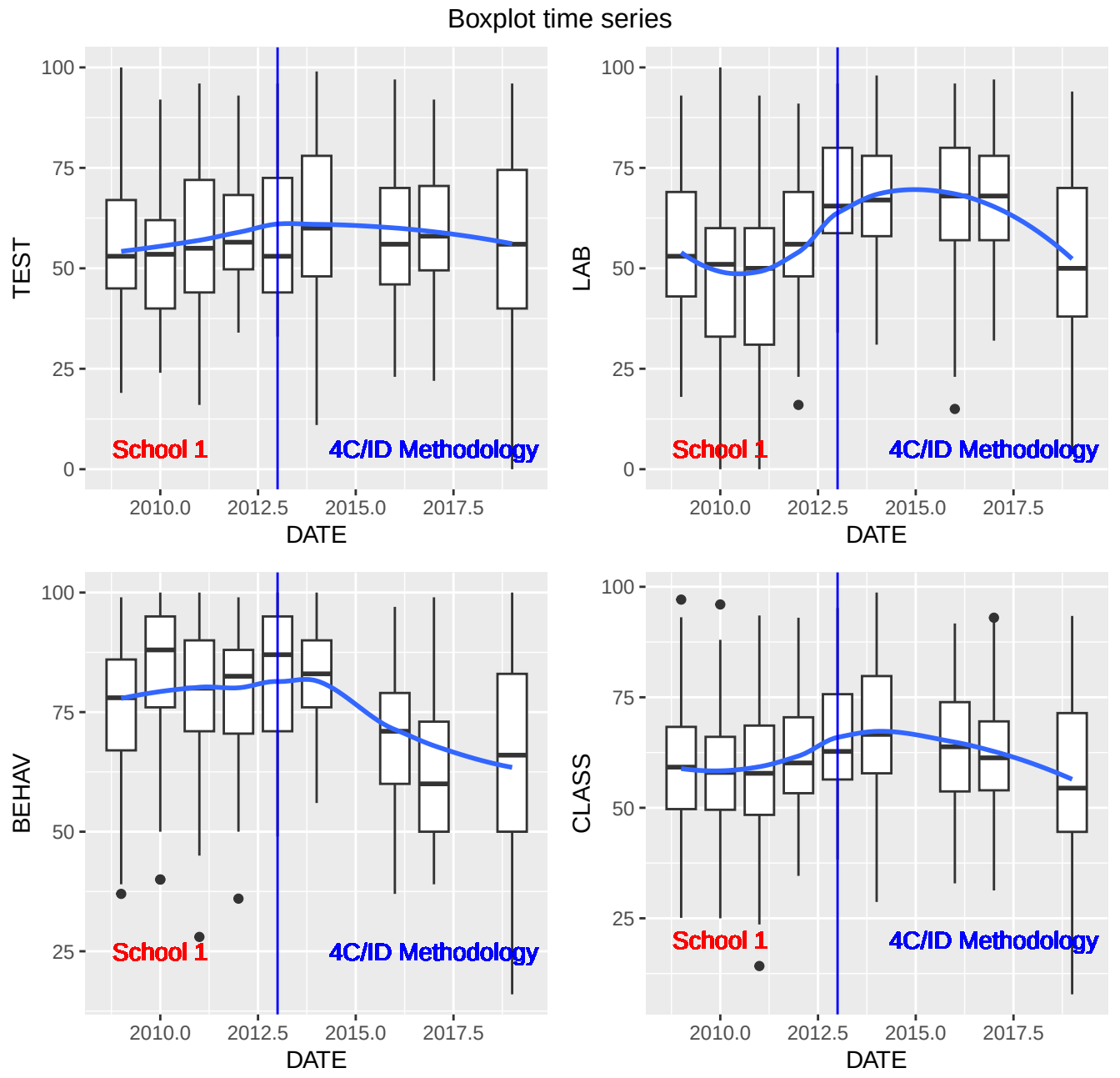


figure 4: junior grade sample for school 1

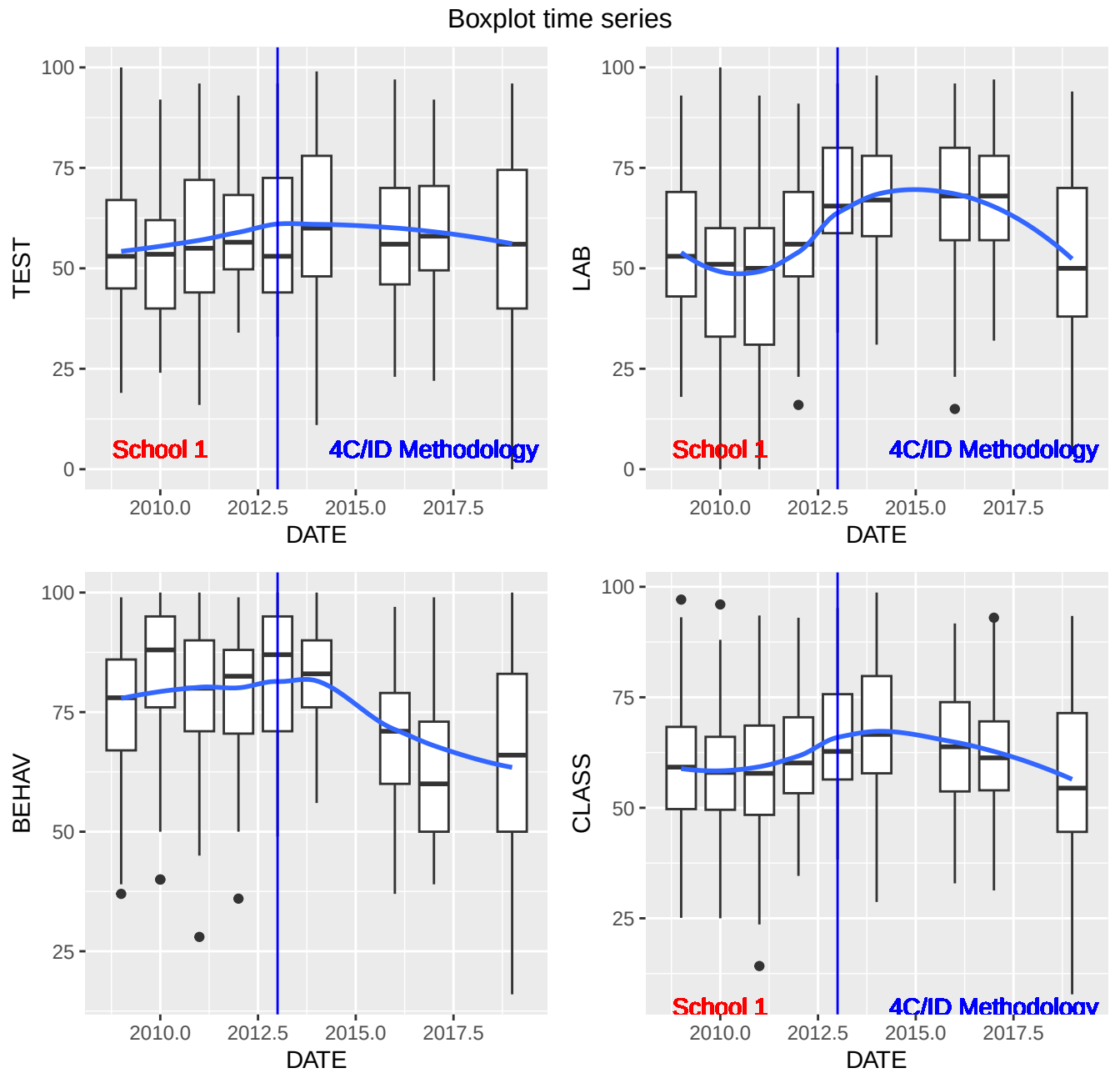


Figure 5: junior high grade sample for school 1

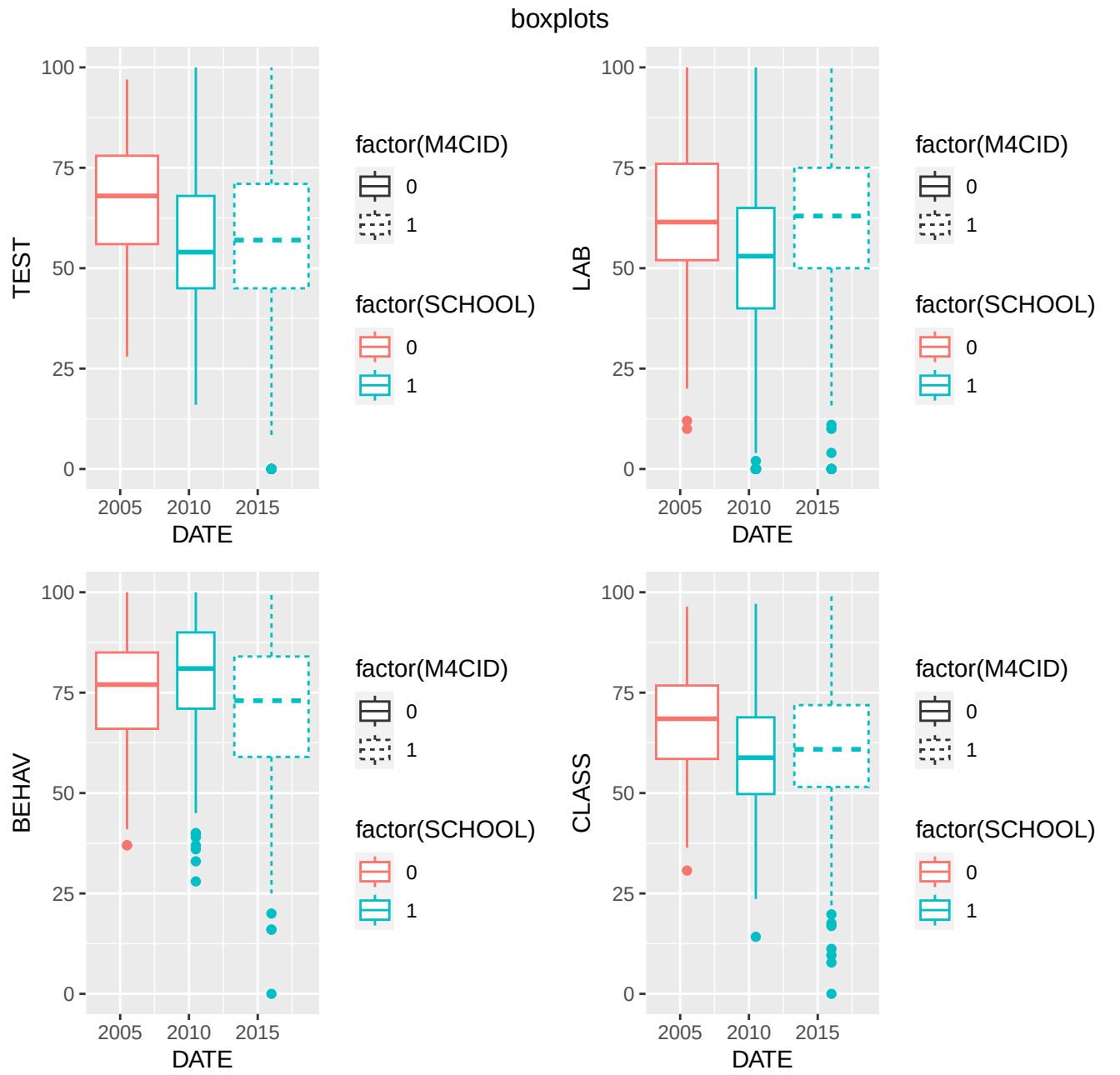


Figure 6: boxplot grouped by school and 4C/ID methodology

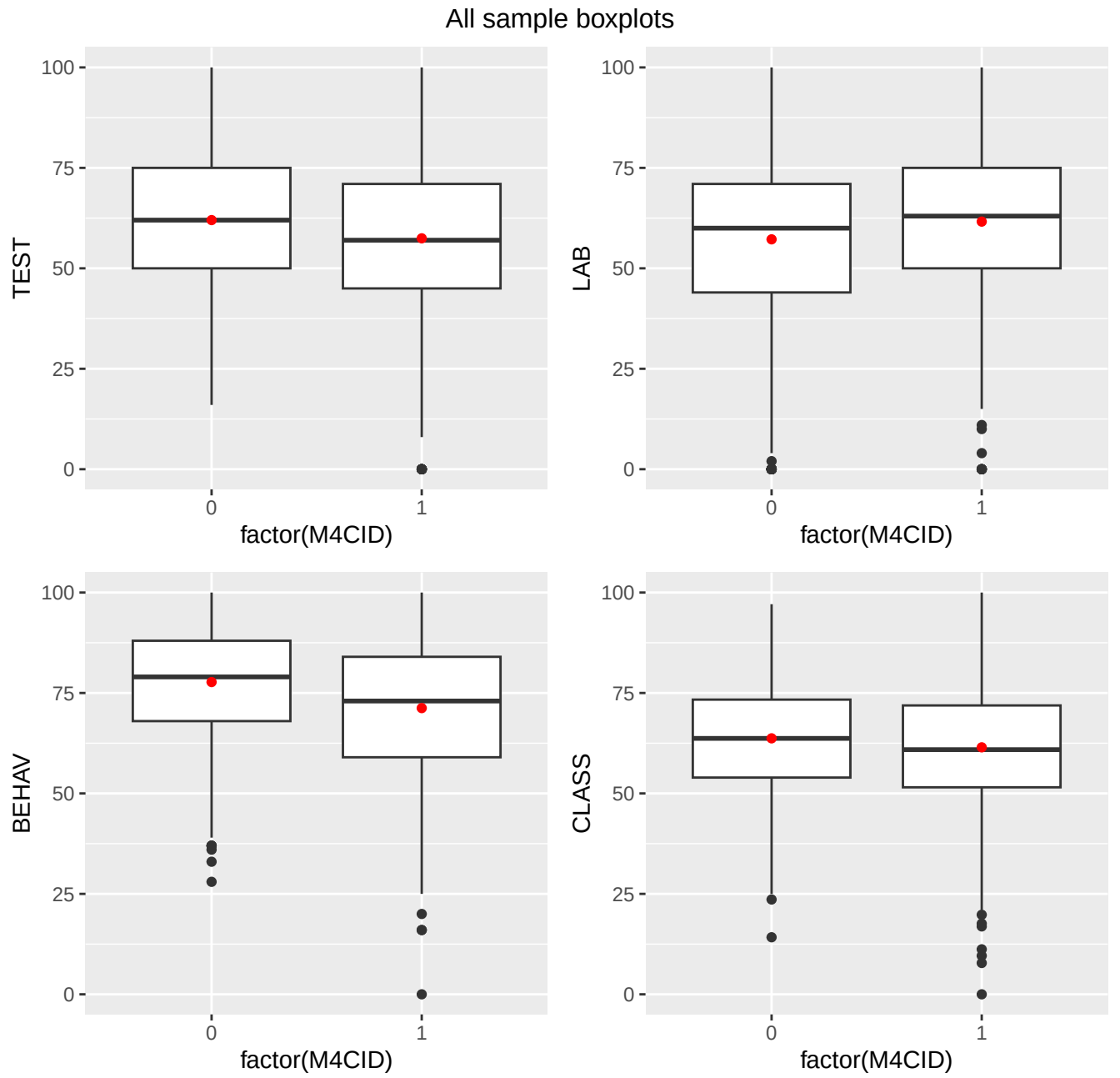


Figure 7: boxplots grouped by 4C/ID methodology showing the mean by the red dot

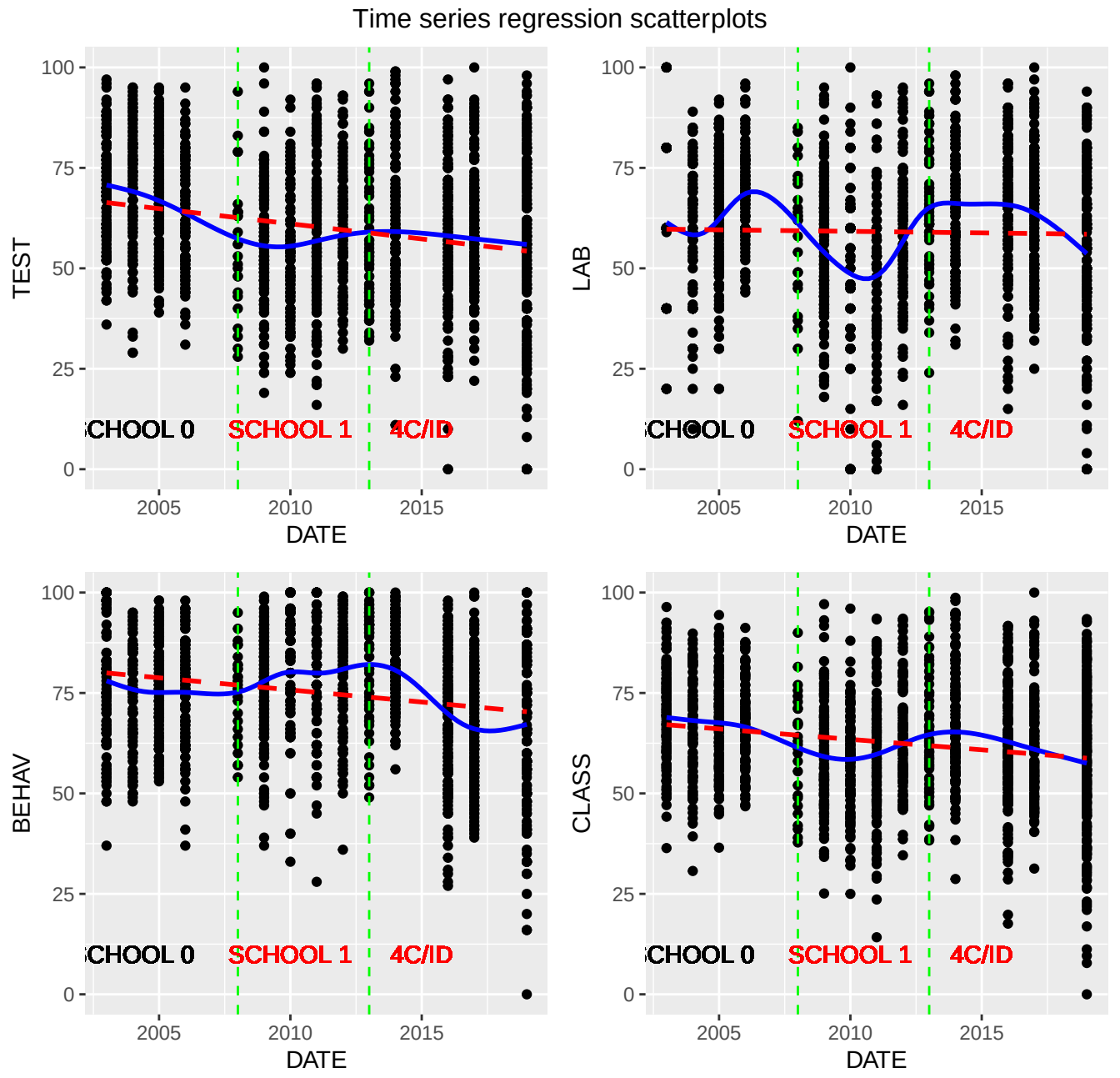


Figure 8: Local Polynomial Regression Fitting in red

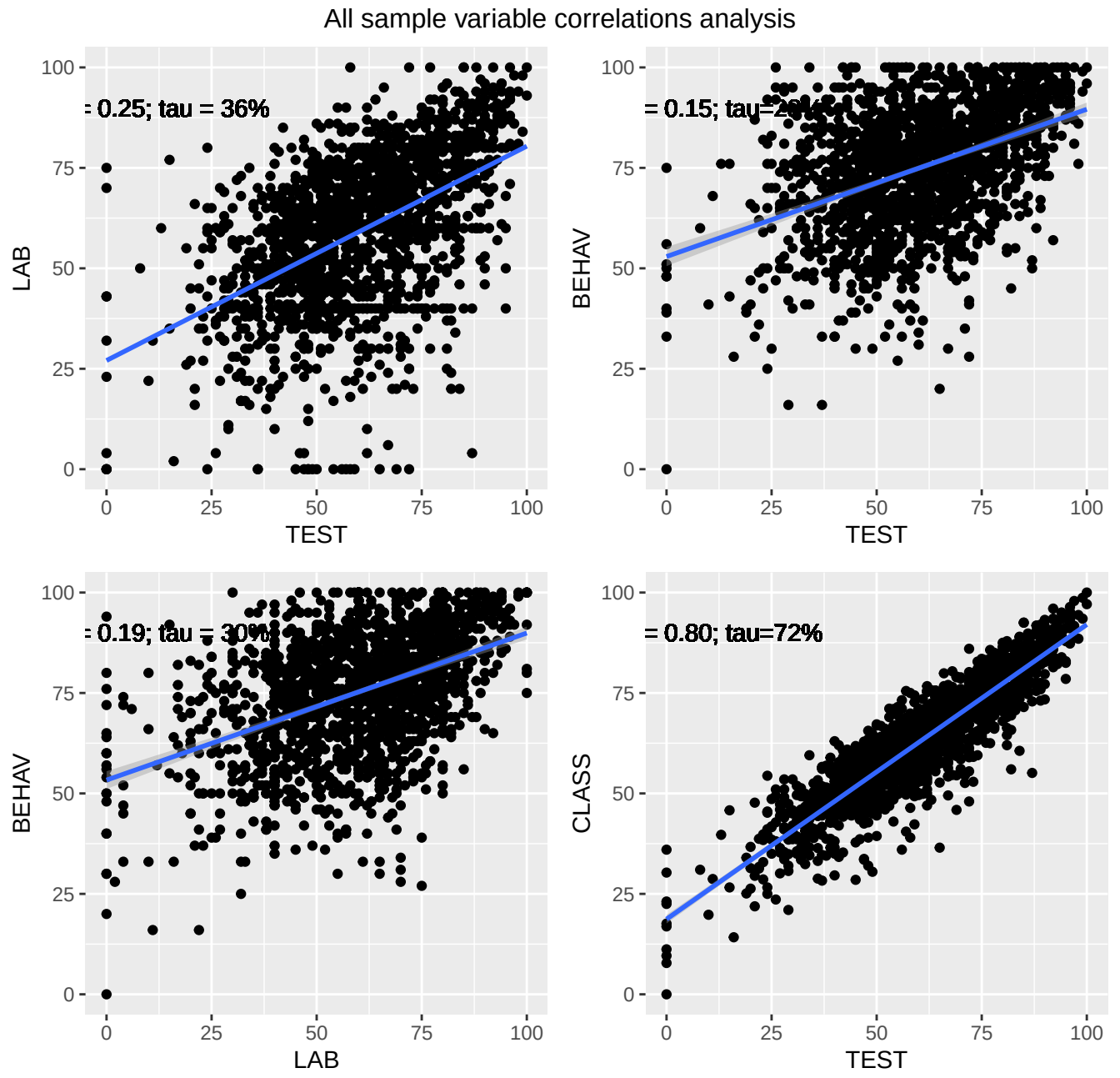


Figure 9: Variable dependency analyss

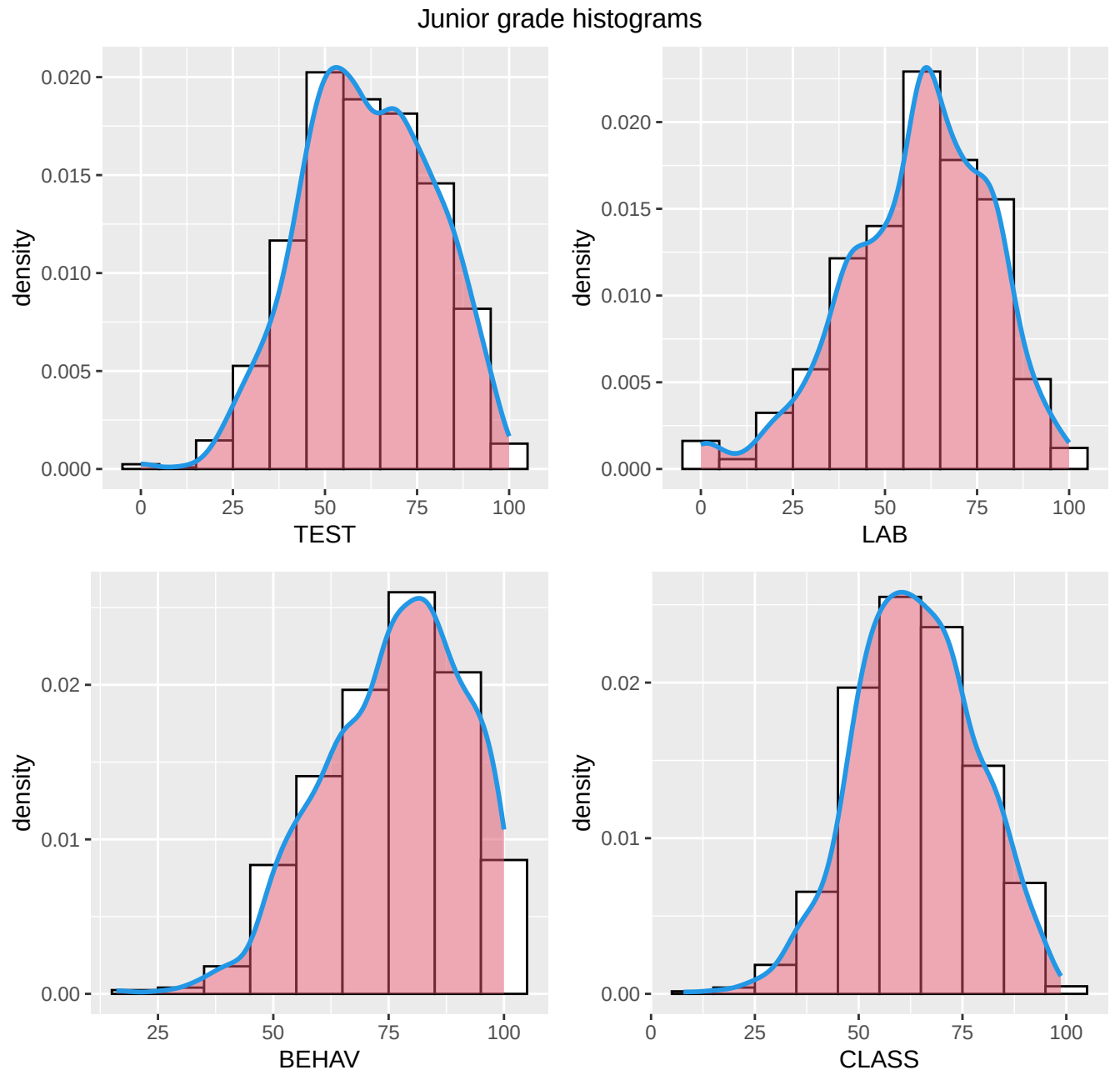


Figure 10: normality testing for the junior grade sample

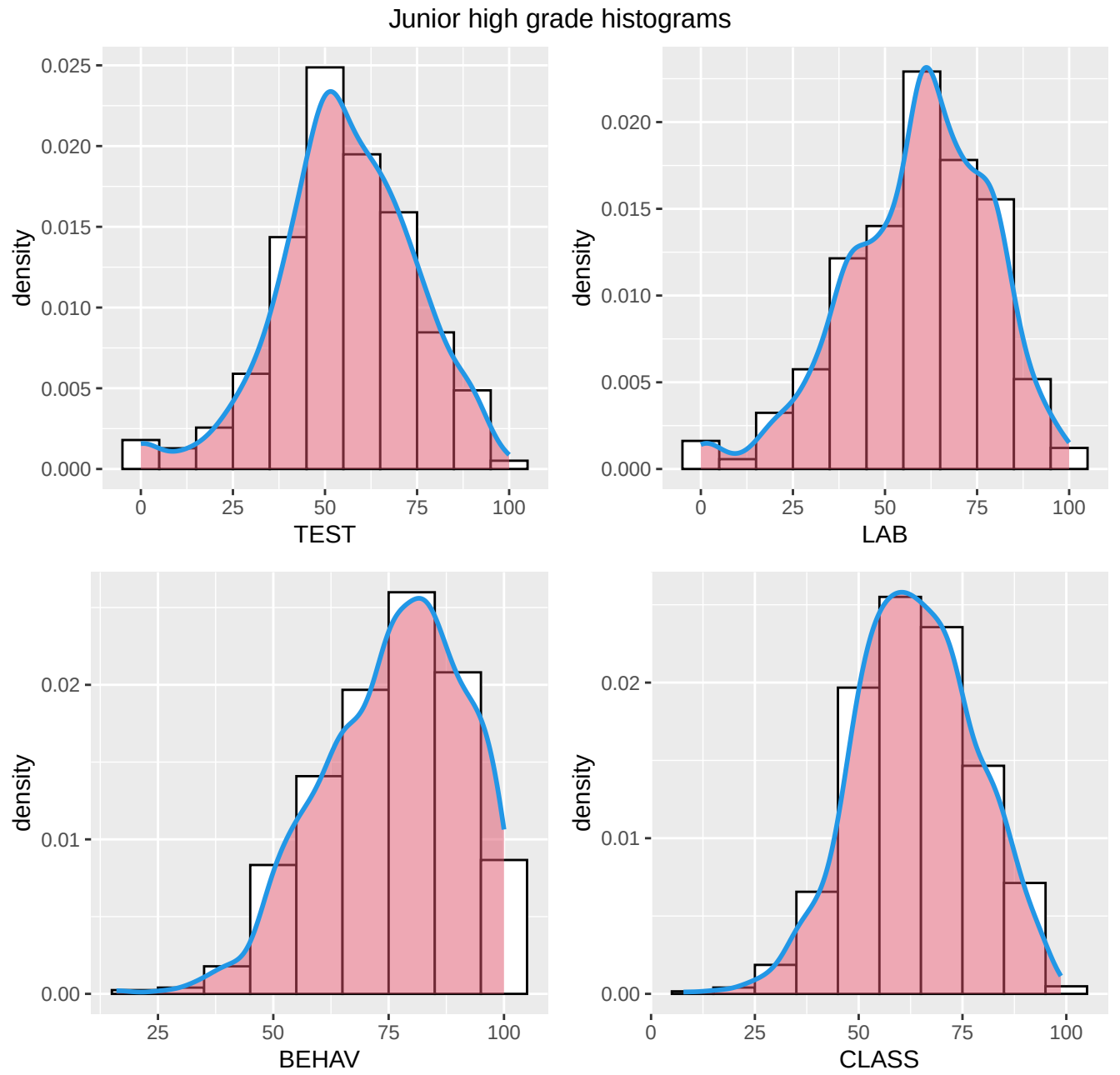
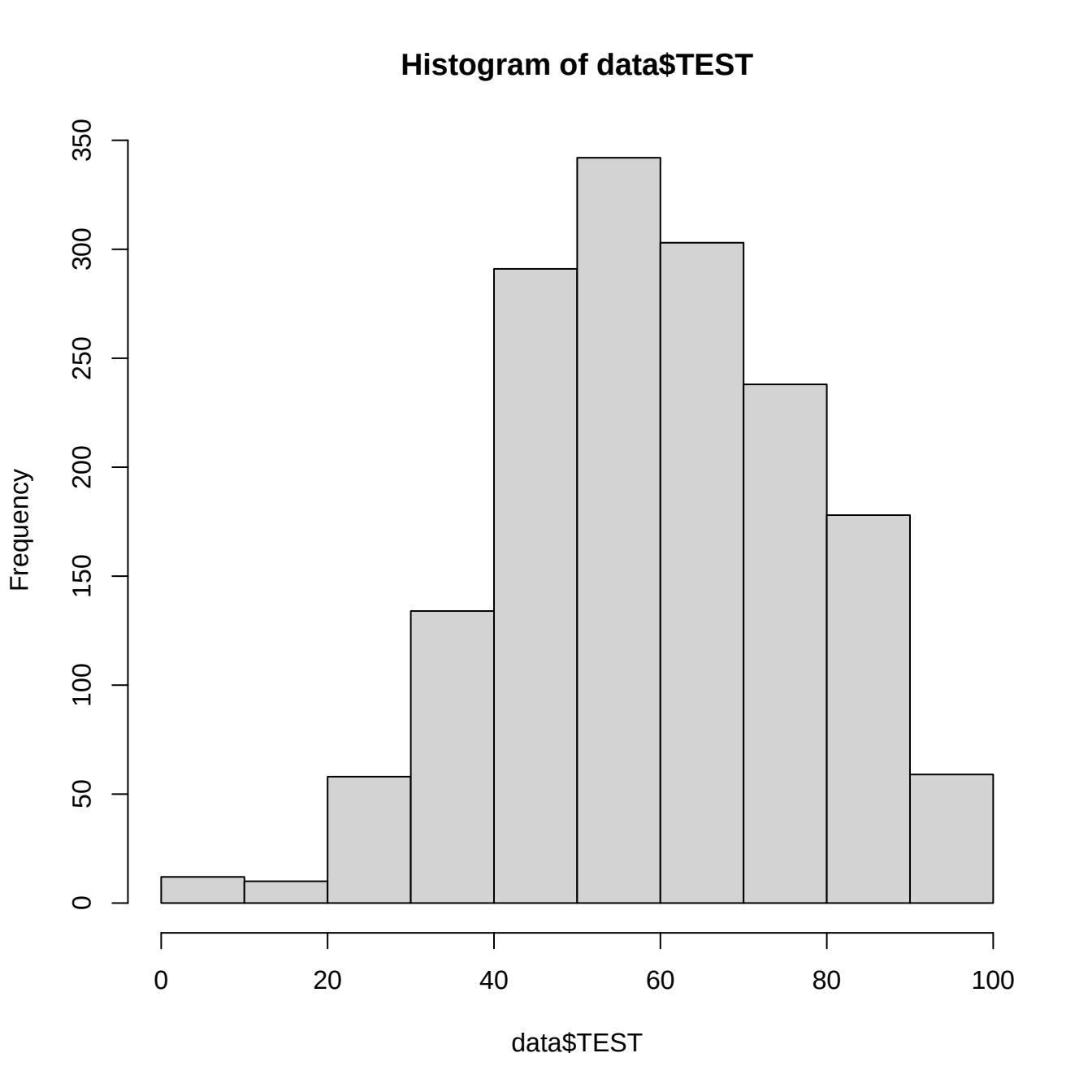
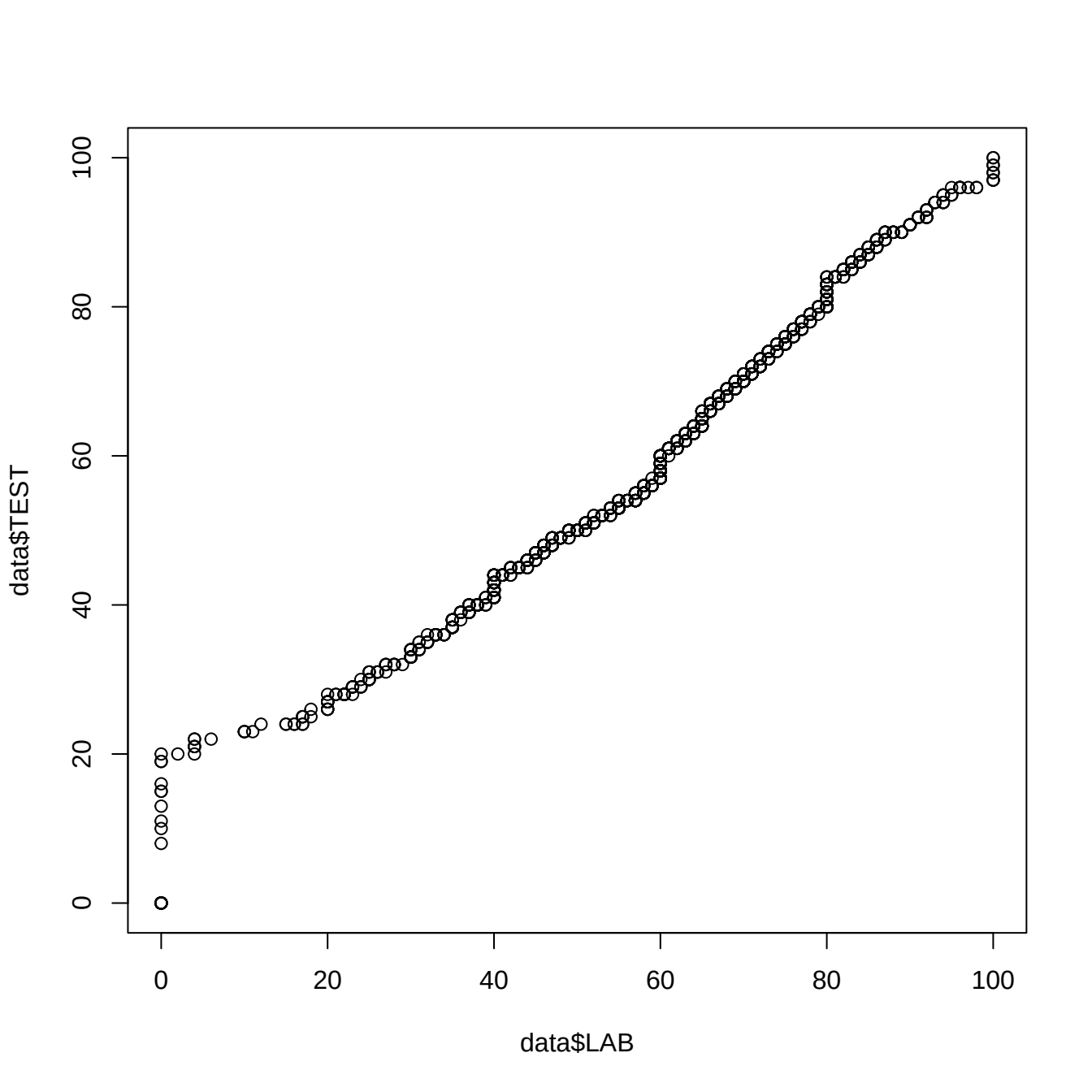
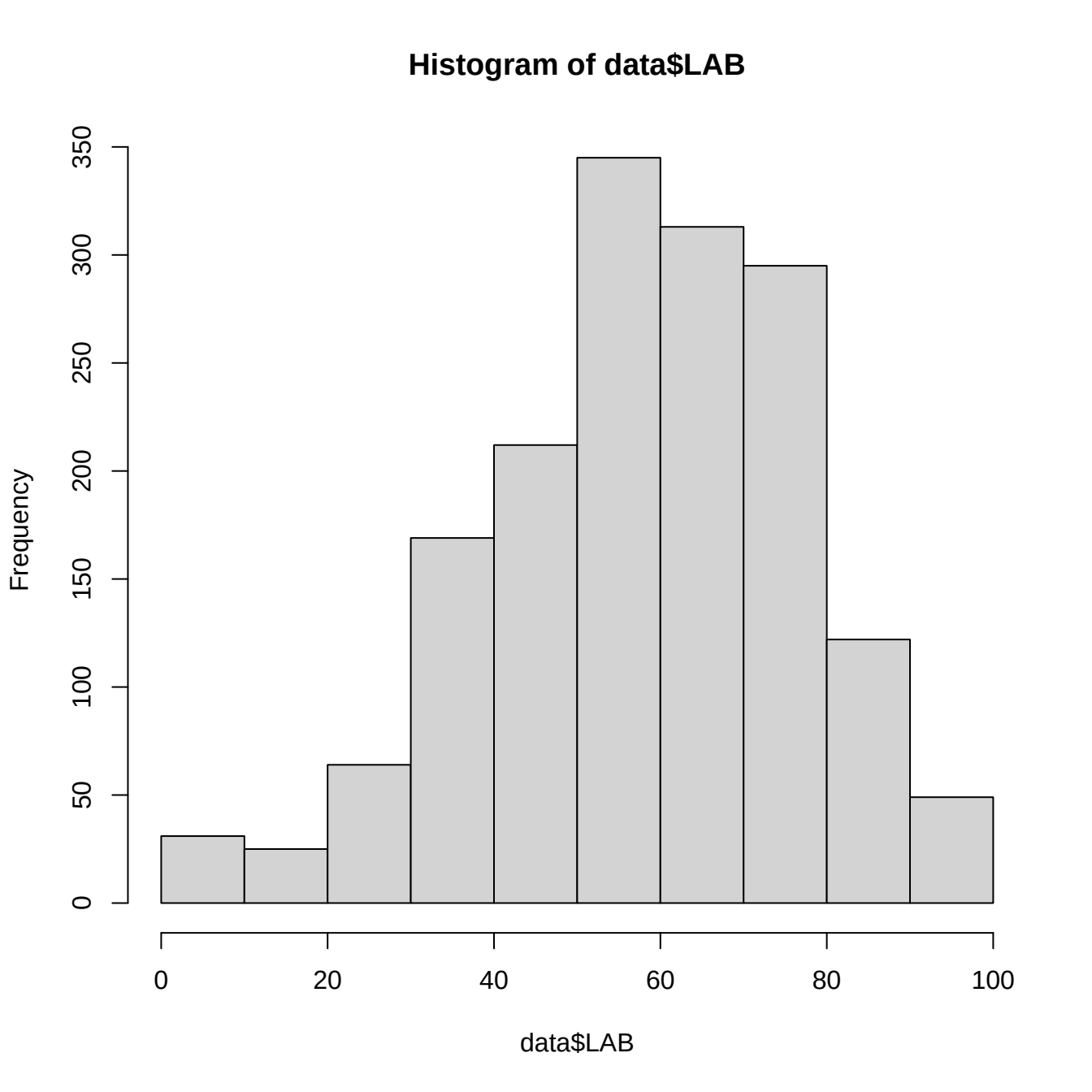
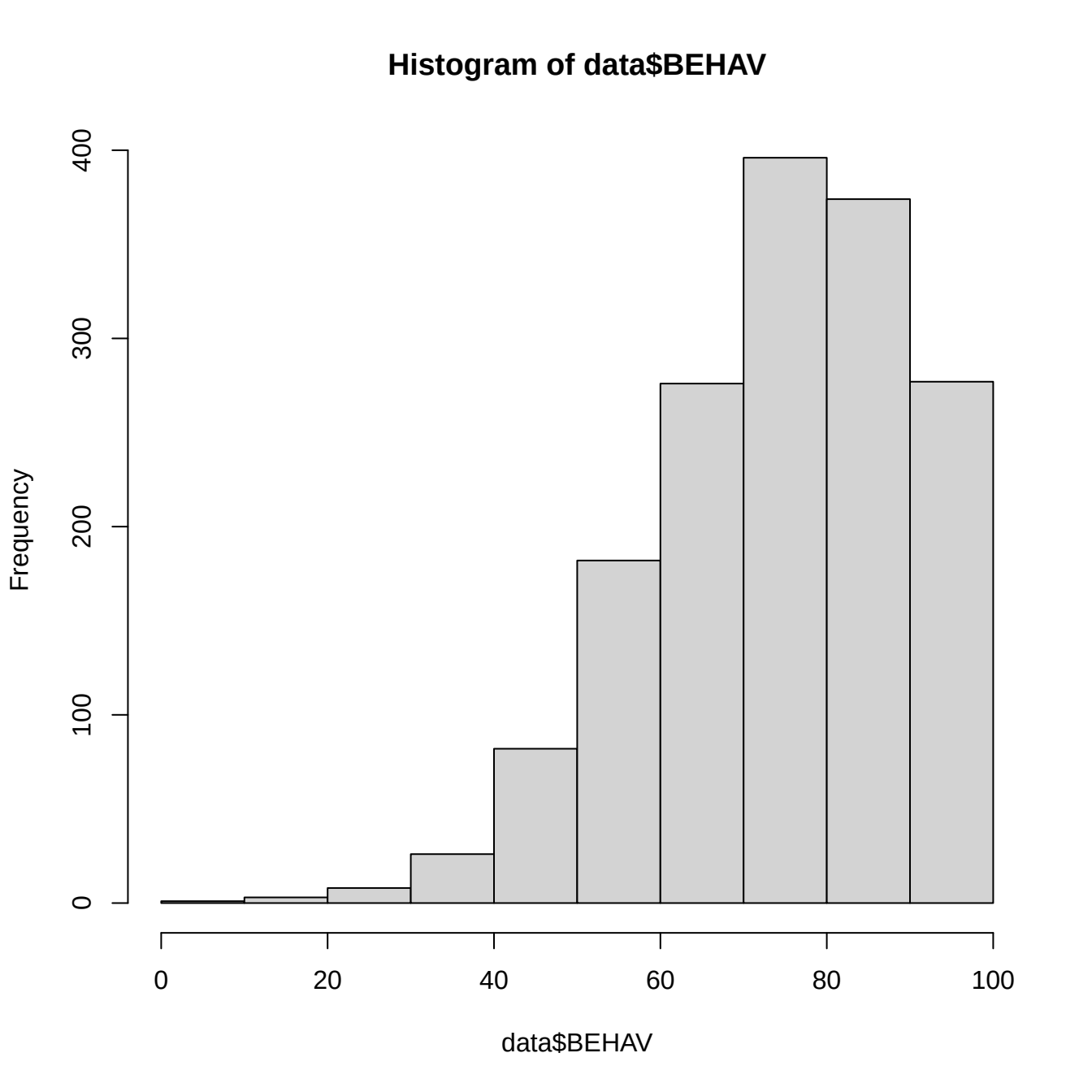


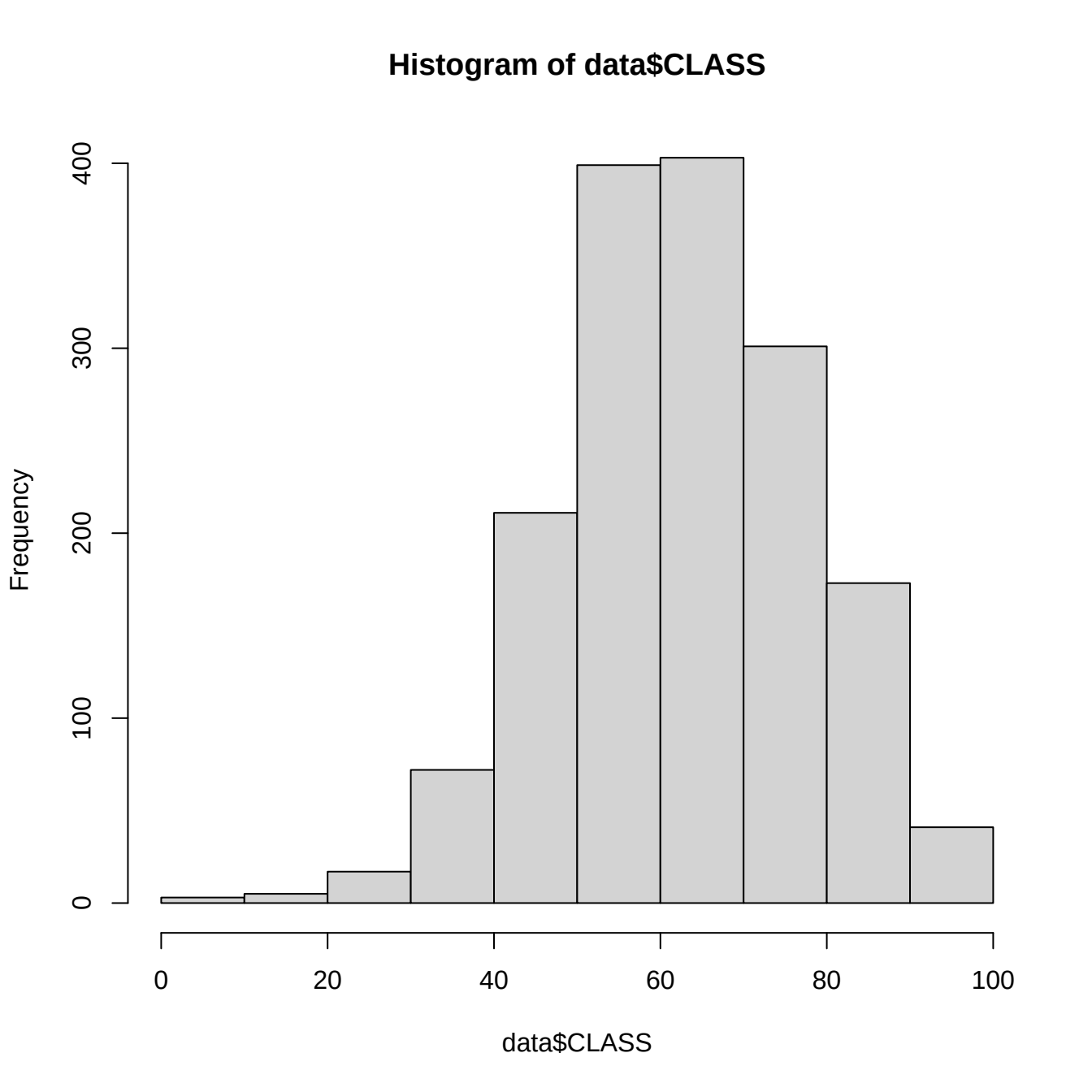
Figure 11: normality testing for the junior high grade sample

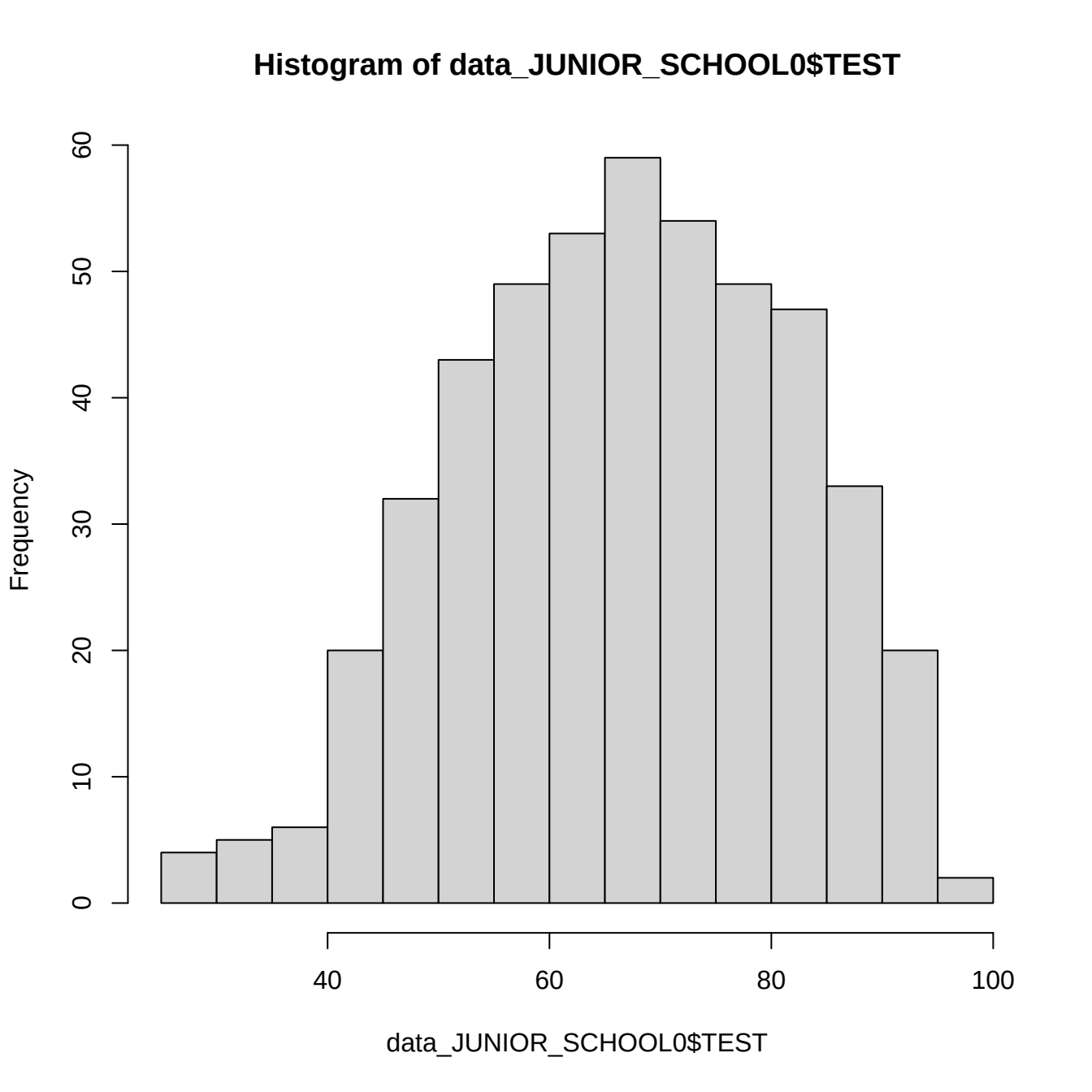

Histogram of data$TEST
Frequency
0
50
100
150
200
250
300
350
0
20
40
60
80
100
data$TEST

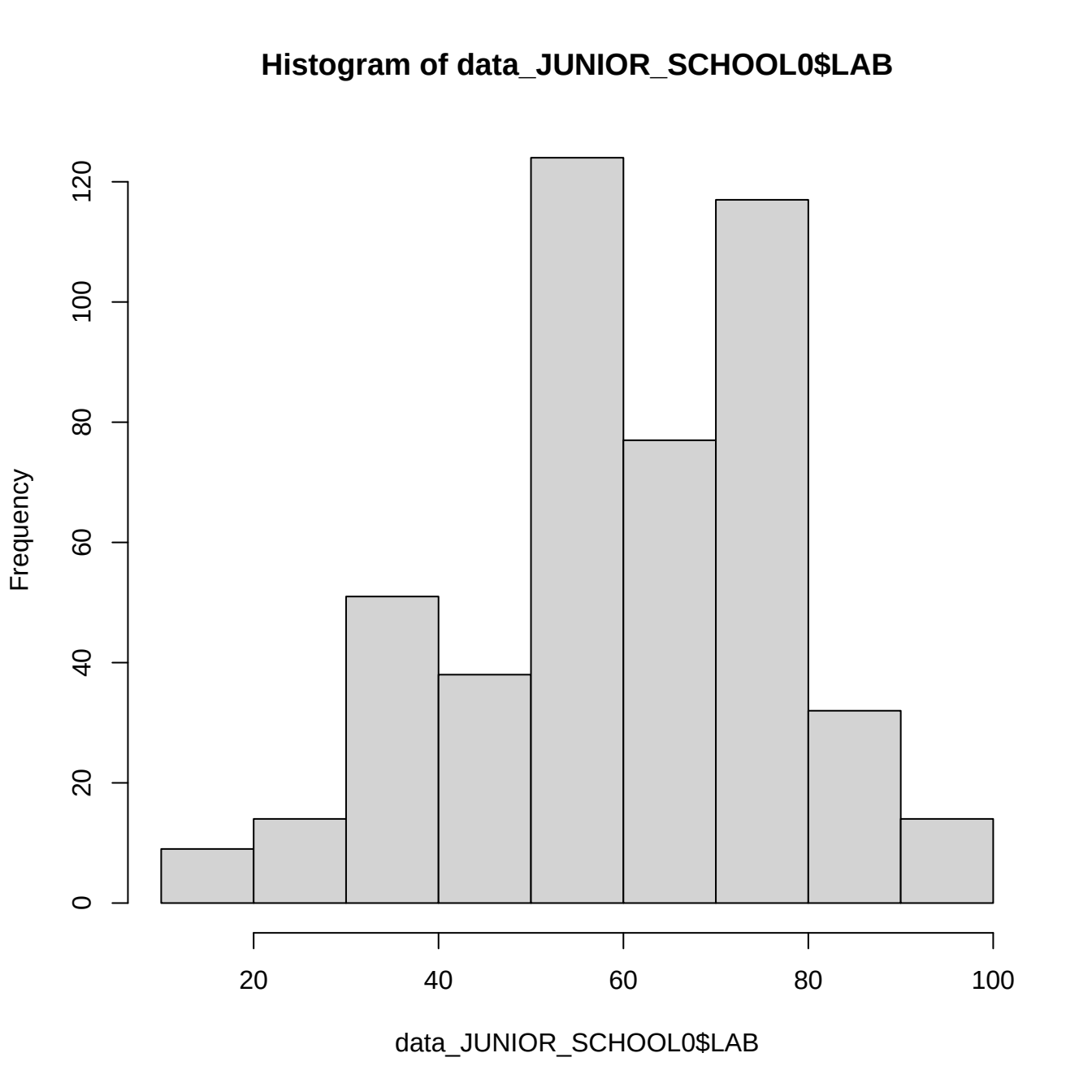

data$TEST
data$LAB
0
20
40
60
80
100

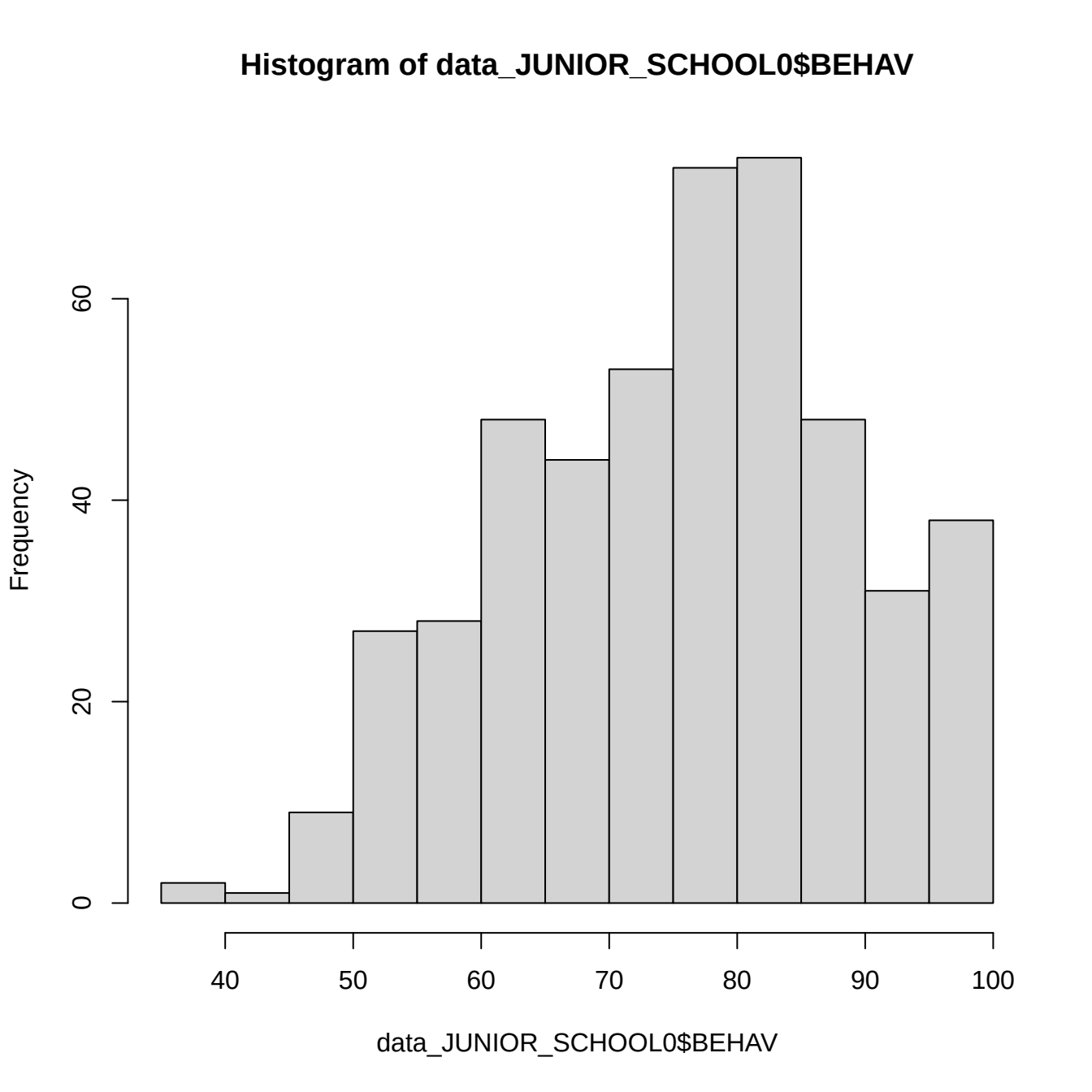

Histogram of data$LAB
Frequency
0
50
100
150
200
250
300
350
0
20
40
60
80
100
data$LAB

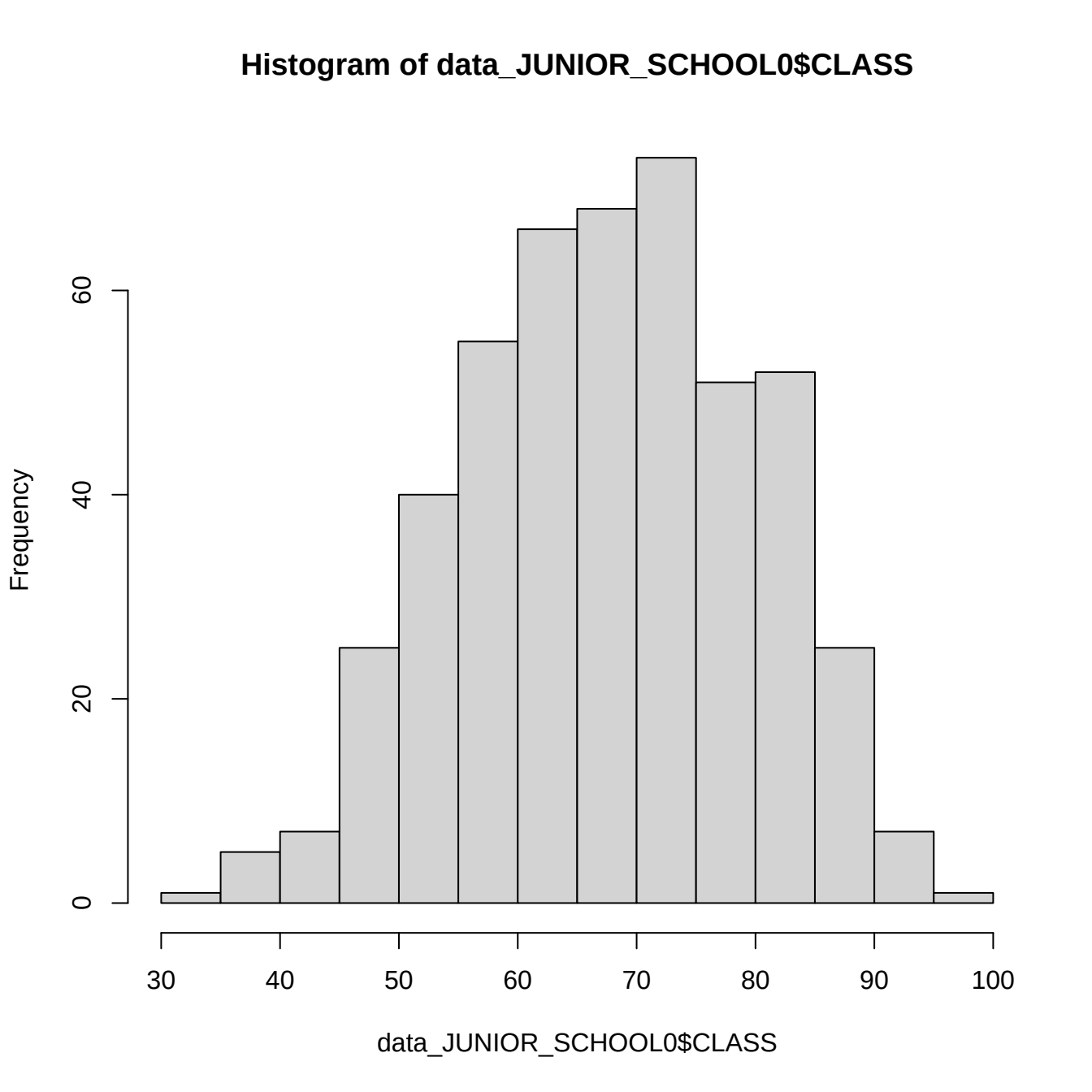

Histogram of data$BEHAV
Frequency
0
100
200
300
400
0
20
40
60
80
100
data$BEHAV

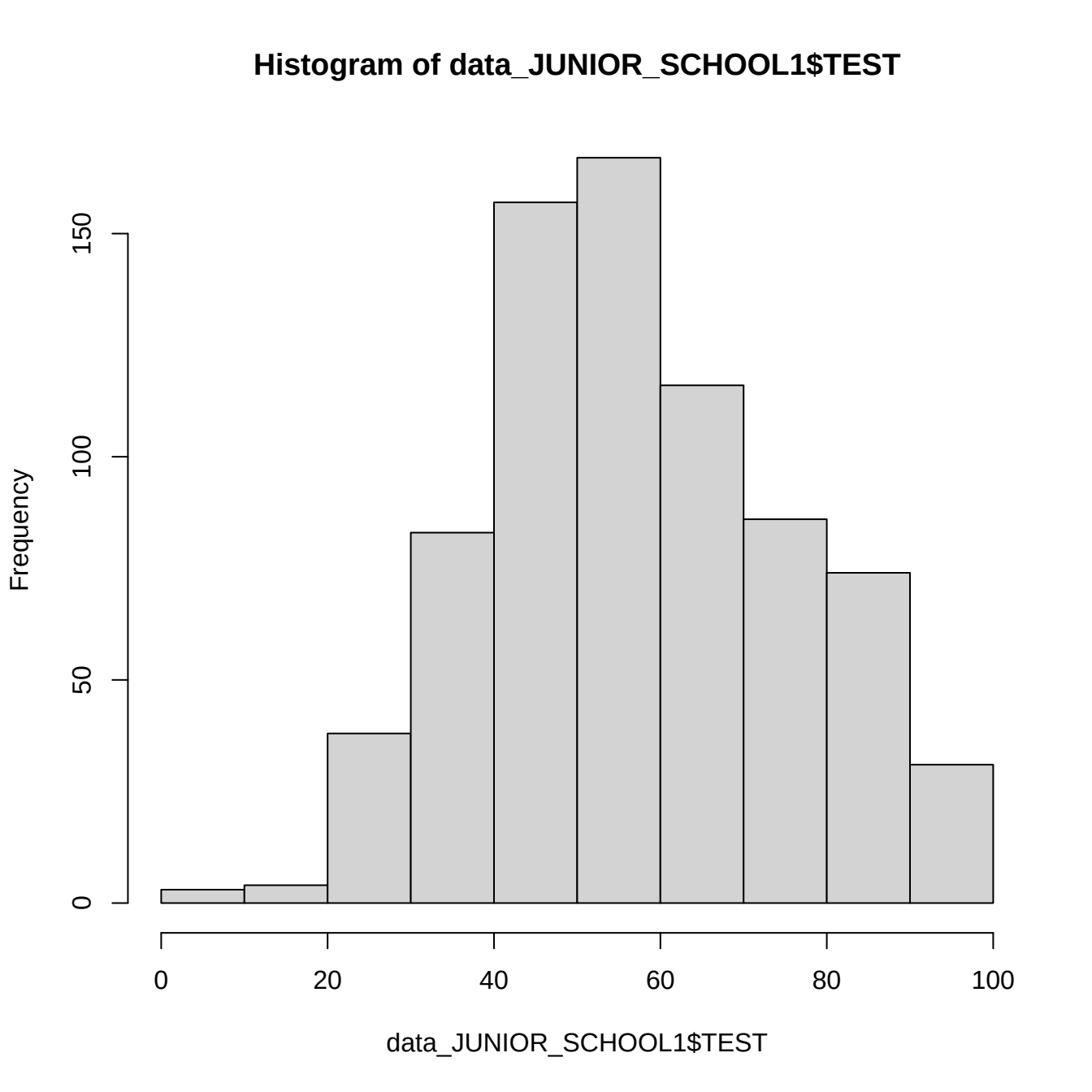

Histogram of data$CLASS
Frequency
0
100
200
300
400
0
20
40
60
80
100
data$CLASS

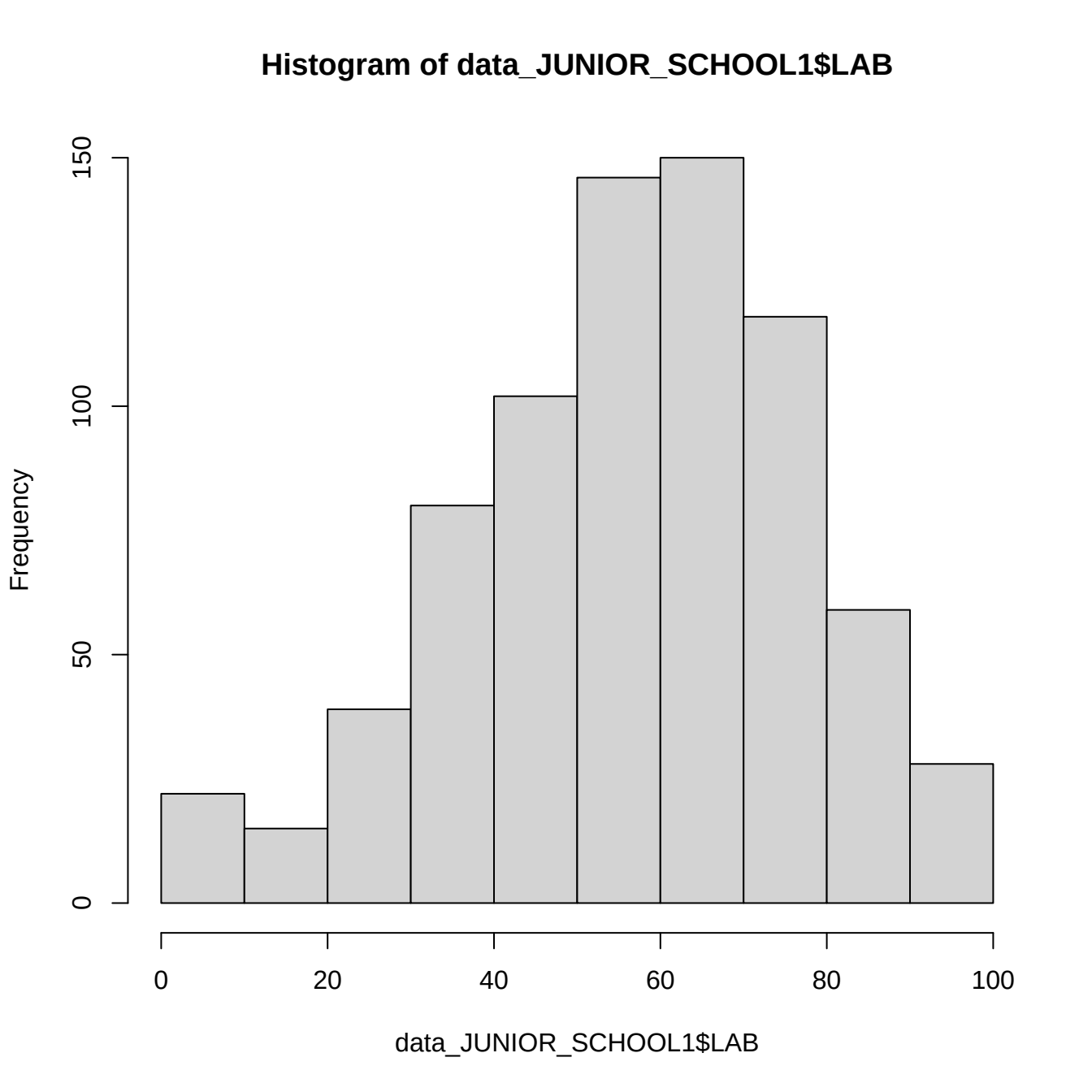

Histogram of data_JUNIOR_SCHOOL0$TEST
Frequency
0
10
20
30
40
50
60
40
60
80
100
data_JUNIOR_SCHOOL0$TEST

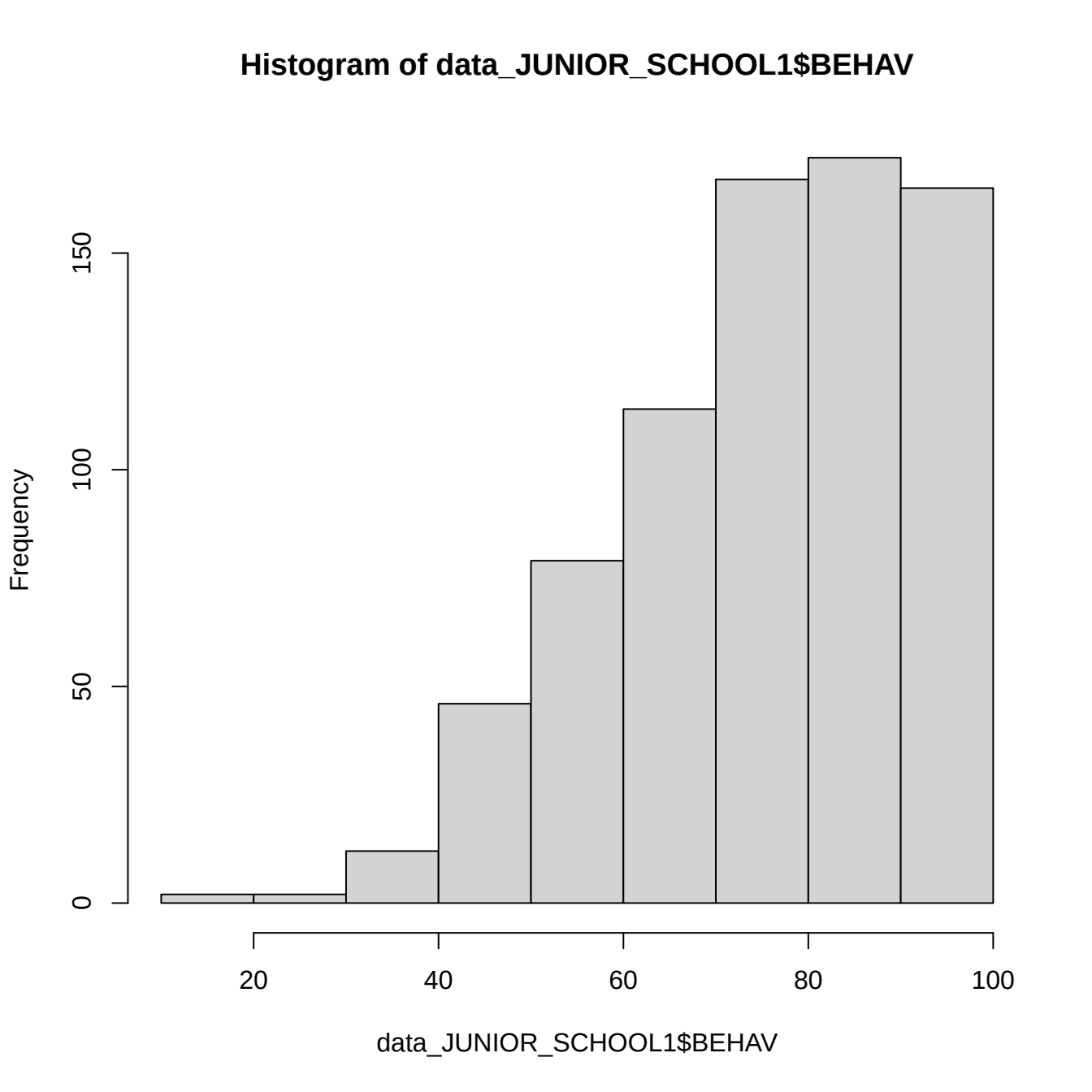

Histogram of data_JUNIOR_SCHOOL0$LAB
Frequency
0
20
40
60
80
100
120
20
40
60
80
100
data_JUNIOR_SCHOOL0$LAB

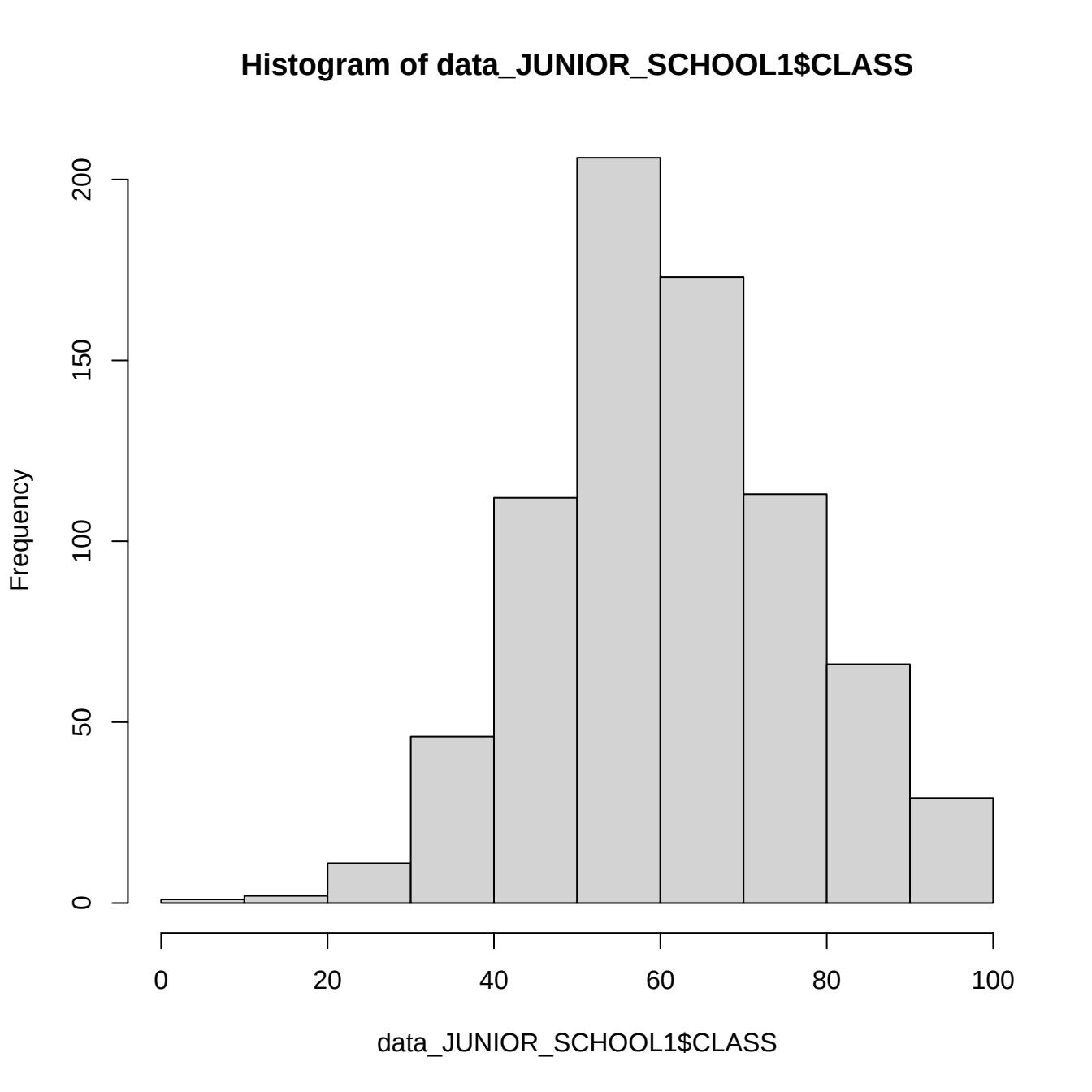

Histogram of data_JUNIOR_SCHOOL0$BEHAV
Frequency
0
20
40
60
40
50
60
70
80
90
100
data_JUNIOR_SCHOOL0$BEHAV


Histogram of data_JUNIOR_SCHOOL0$CLASS
Frequency
0
20
40
60
30
40
50
60
70
80
90
100
data_JUNIOR_SCHOOL0$CLASS


Histogram of data_JUNIOR_SCHOOL1$TEST
Frequency
0
50
100
150
0
20
40
60
80
100
data_JUNIOR_SCHOOL1$TEST


Histogram of data_JUNIOR_SCHOOL1$LAB
Frequency
0
50
100
150
0
20
40
60
80
100
data_JUNIOR_SCHOOL1$LAB


Histogram of data_JUNIOR_SCHOOL1$BEHAV
Frequency
0
50
100
150
20
40
60
80
100
data_JUNIOR_SCHOOL1$BEHAV


Histogram of data_JUNIOR_SCHOOL1$CLASS
Frequency
0
50
100
150
200
0
20
40
60
80
100
data_JUNIOR_SCHOOL1$CLASS

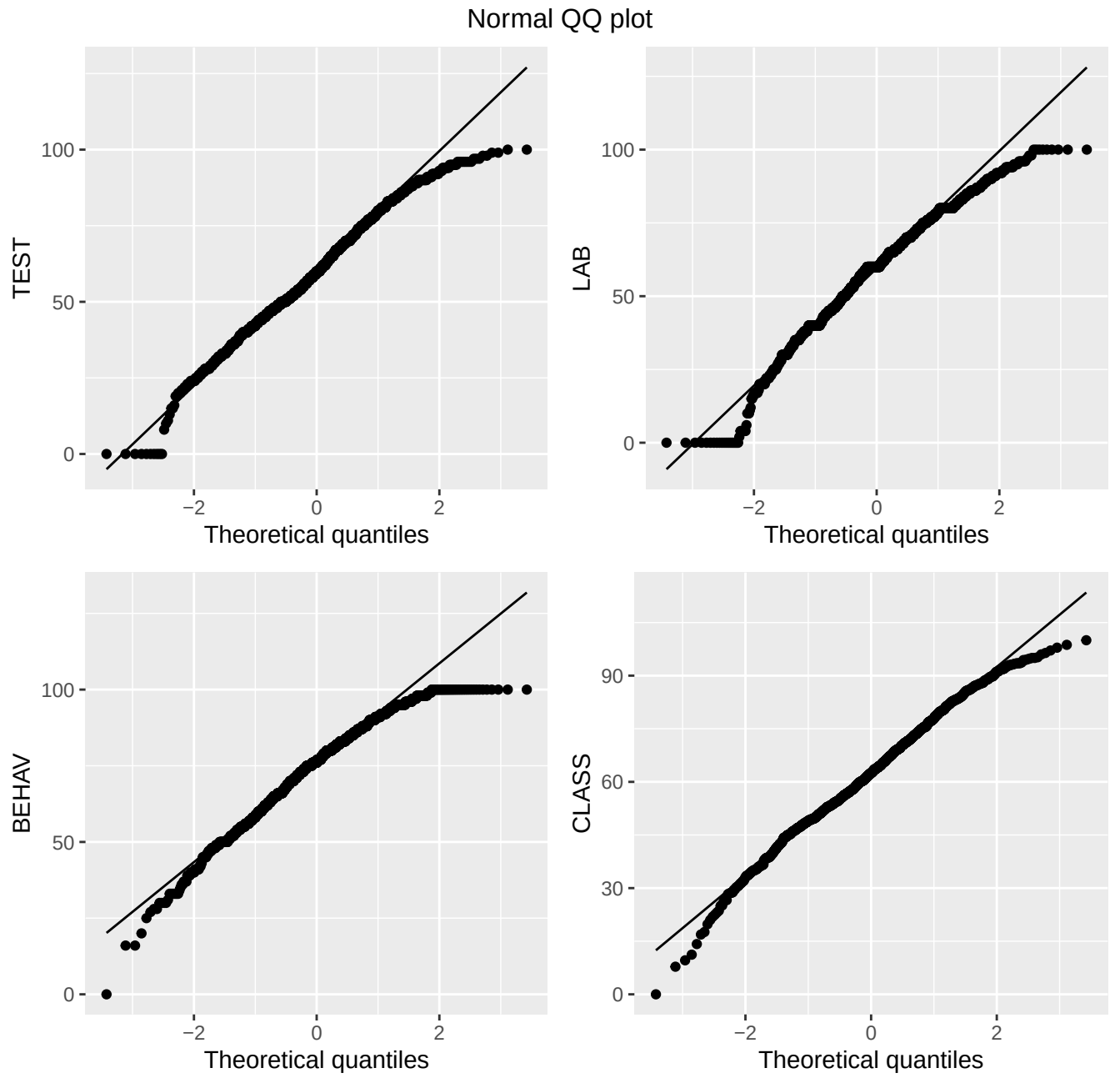


Figure 12: normality testing for all sample

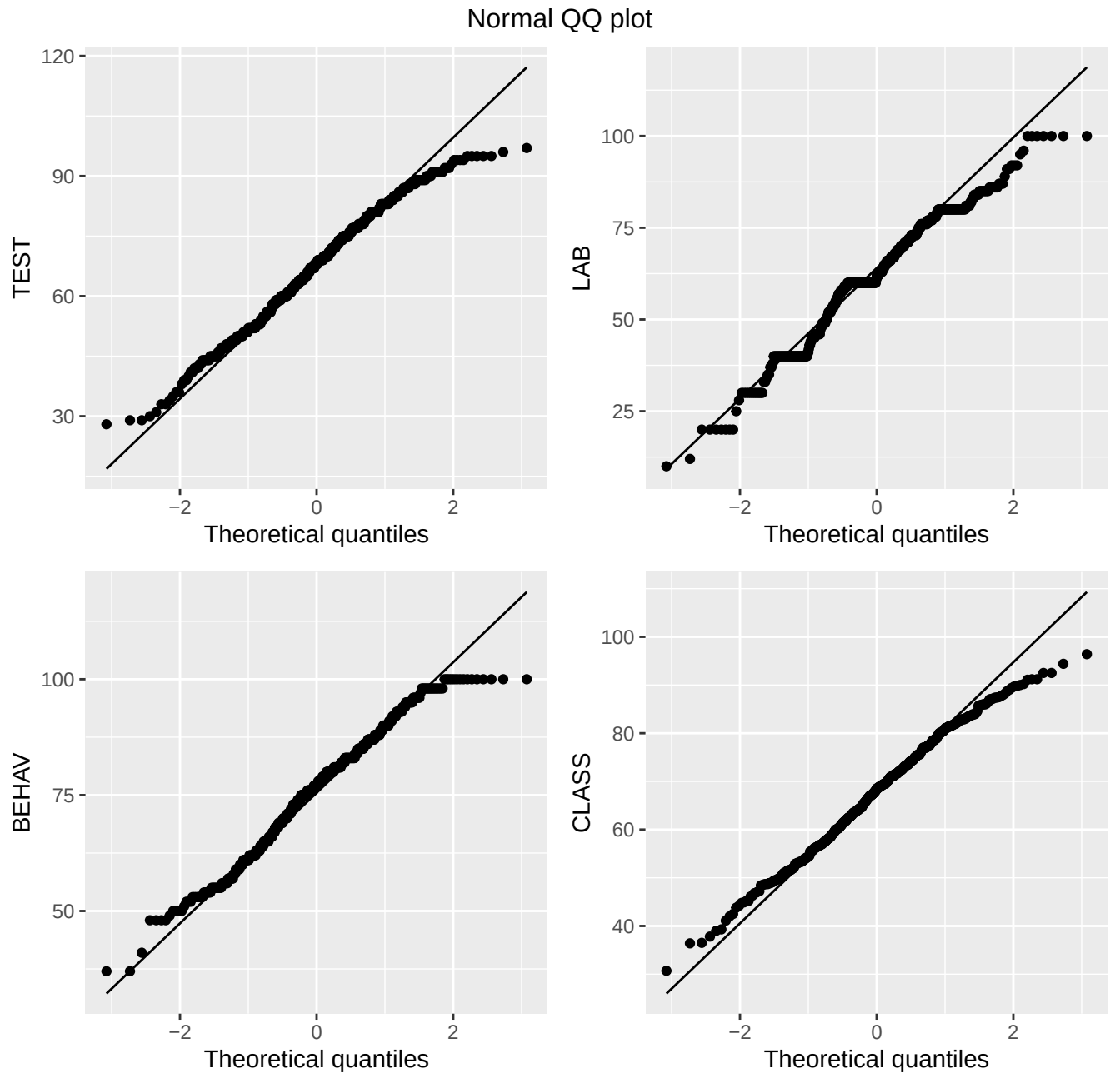


Figure 13: normality testing for SCHOOL 0

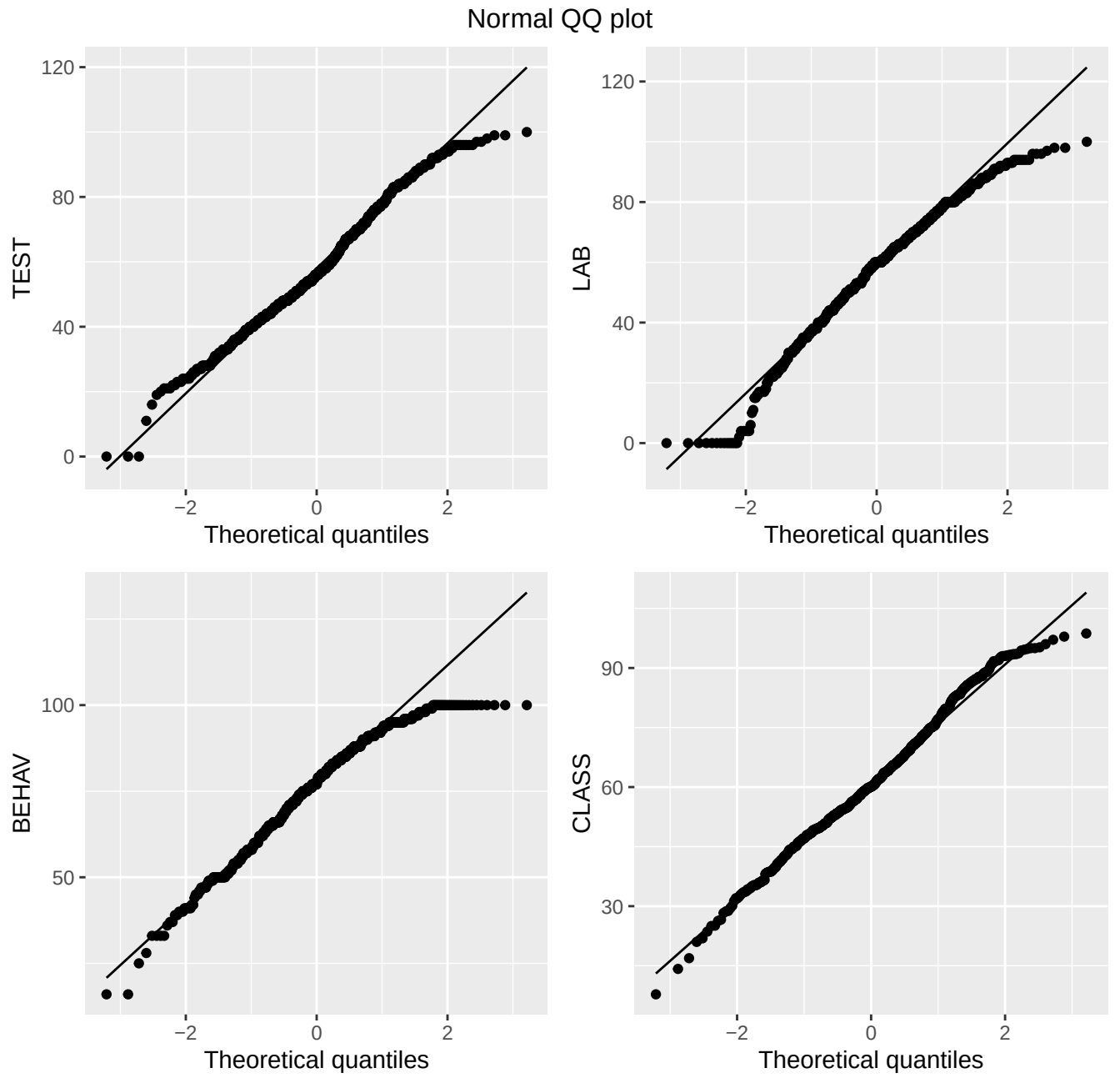
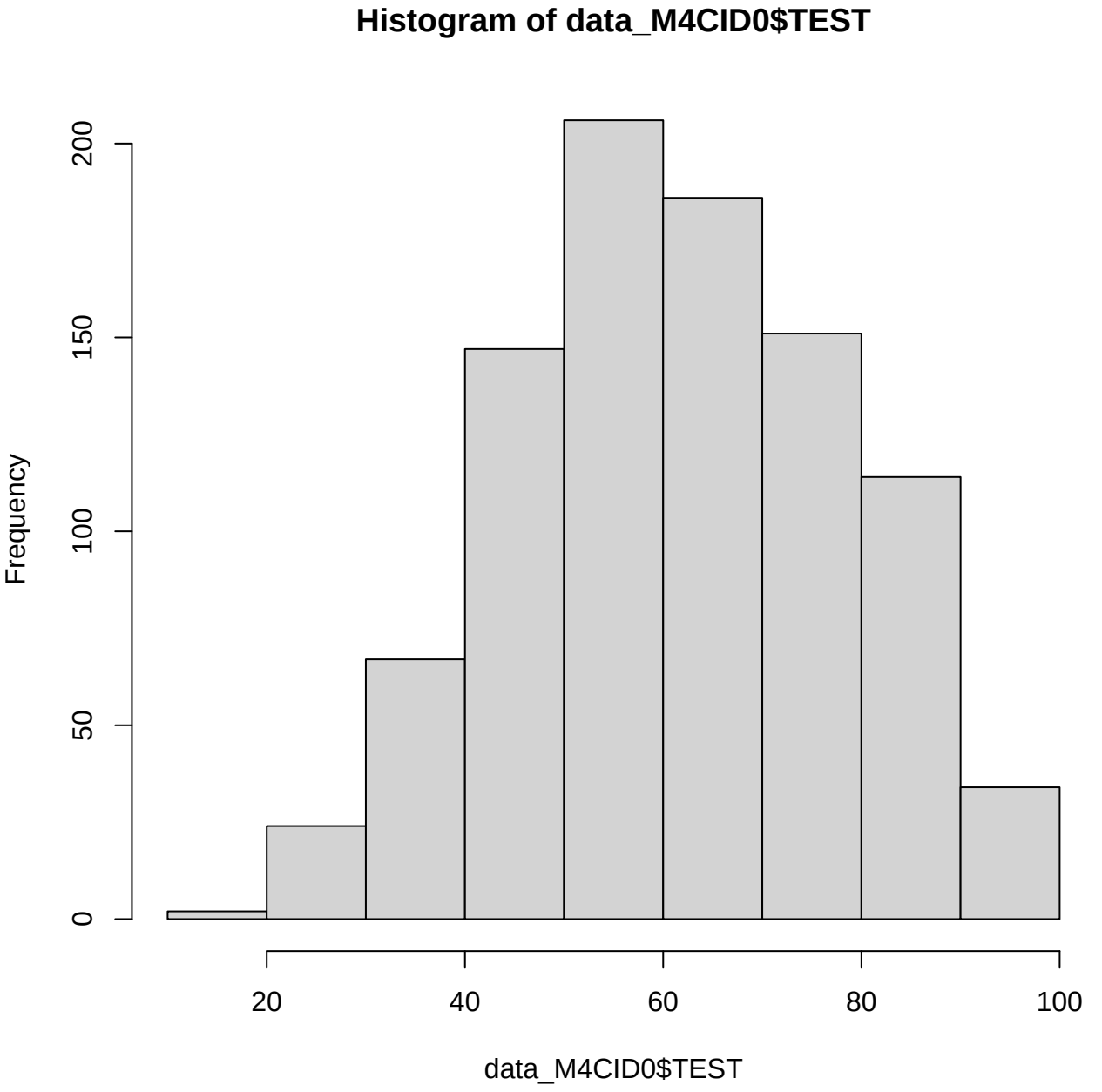
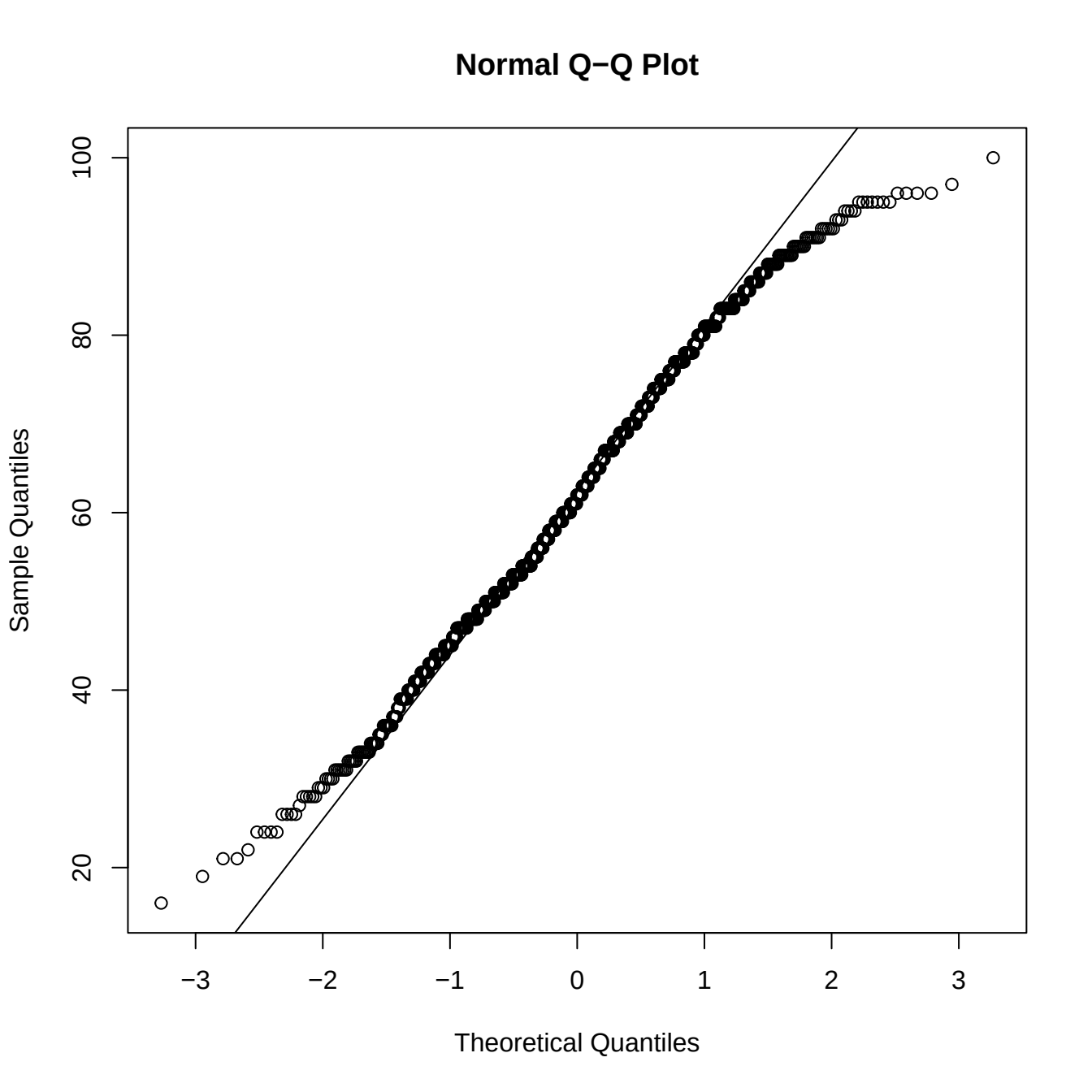
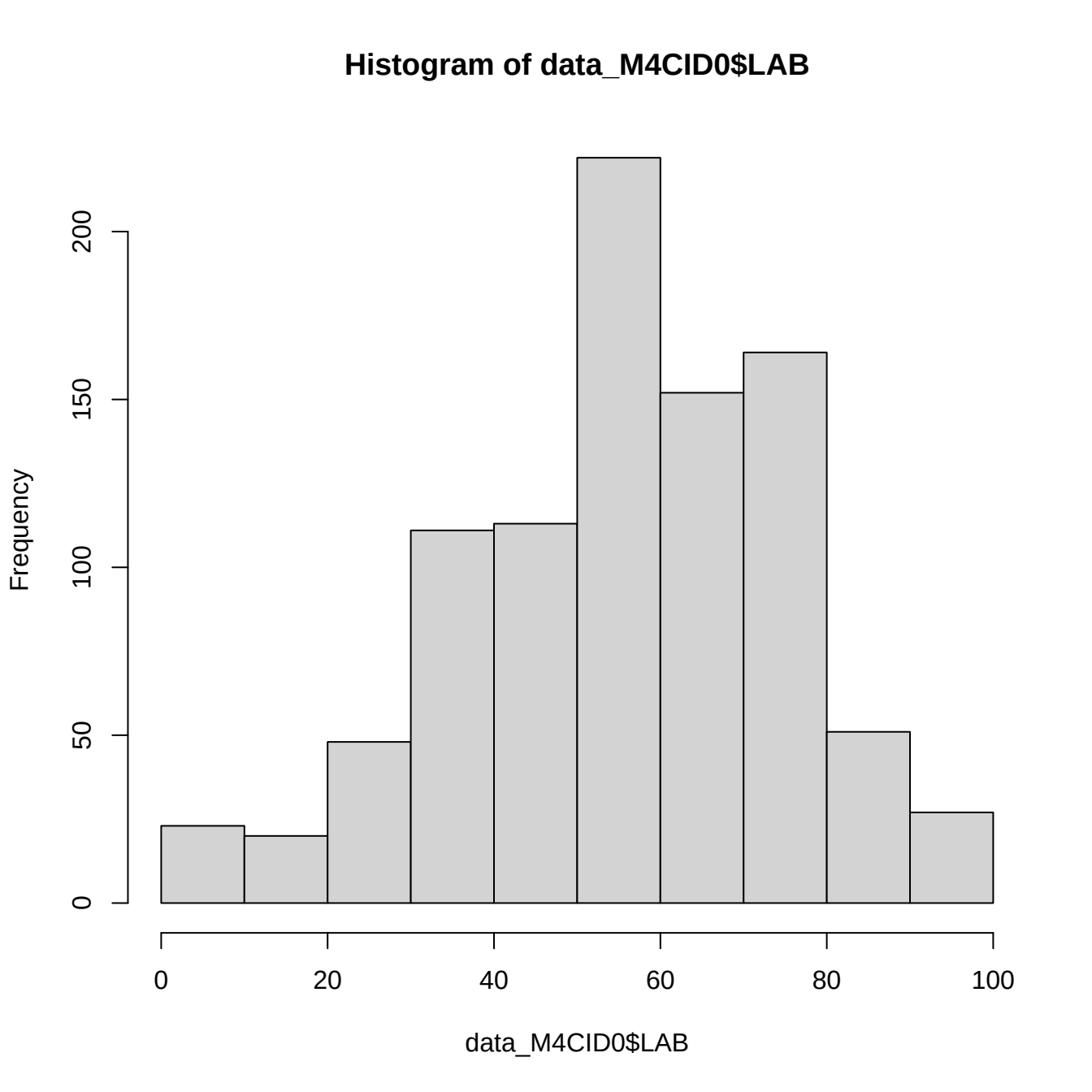
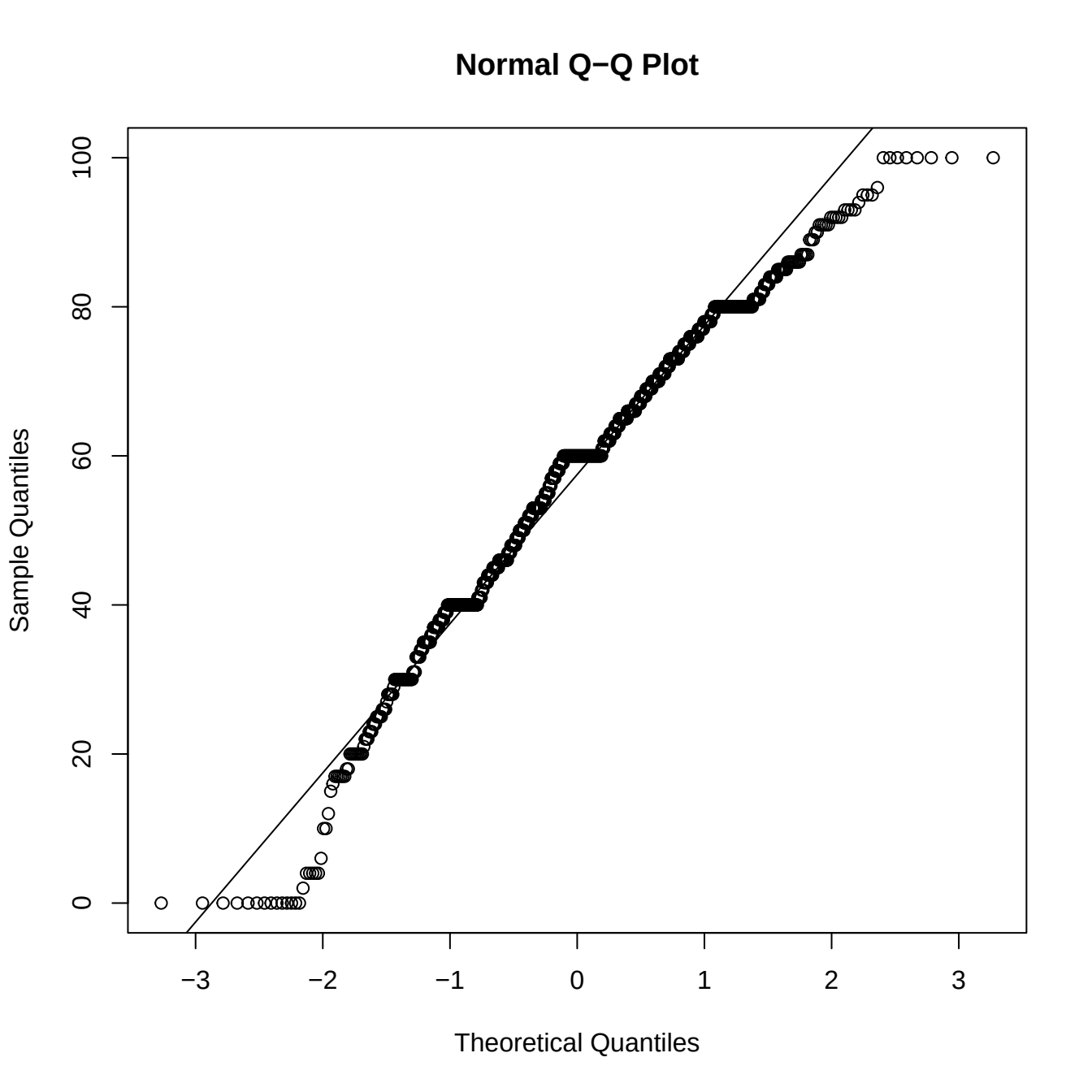


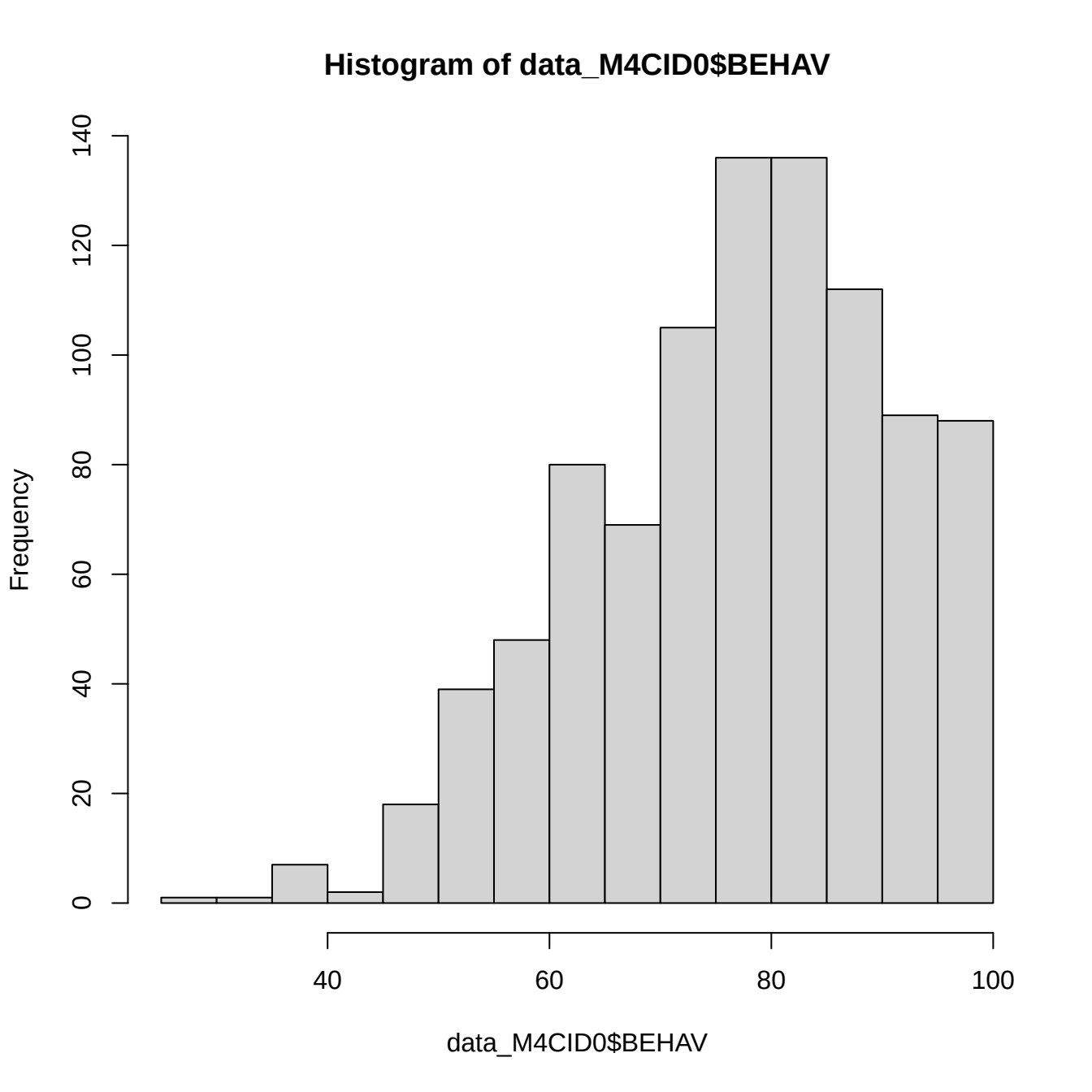
Figure 14: normality testing for SCHOOL 1

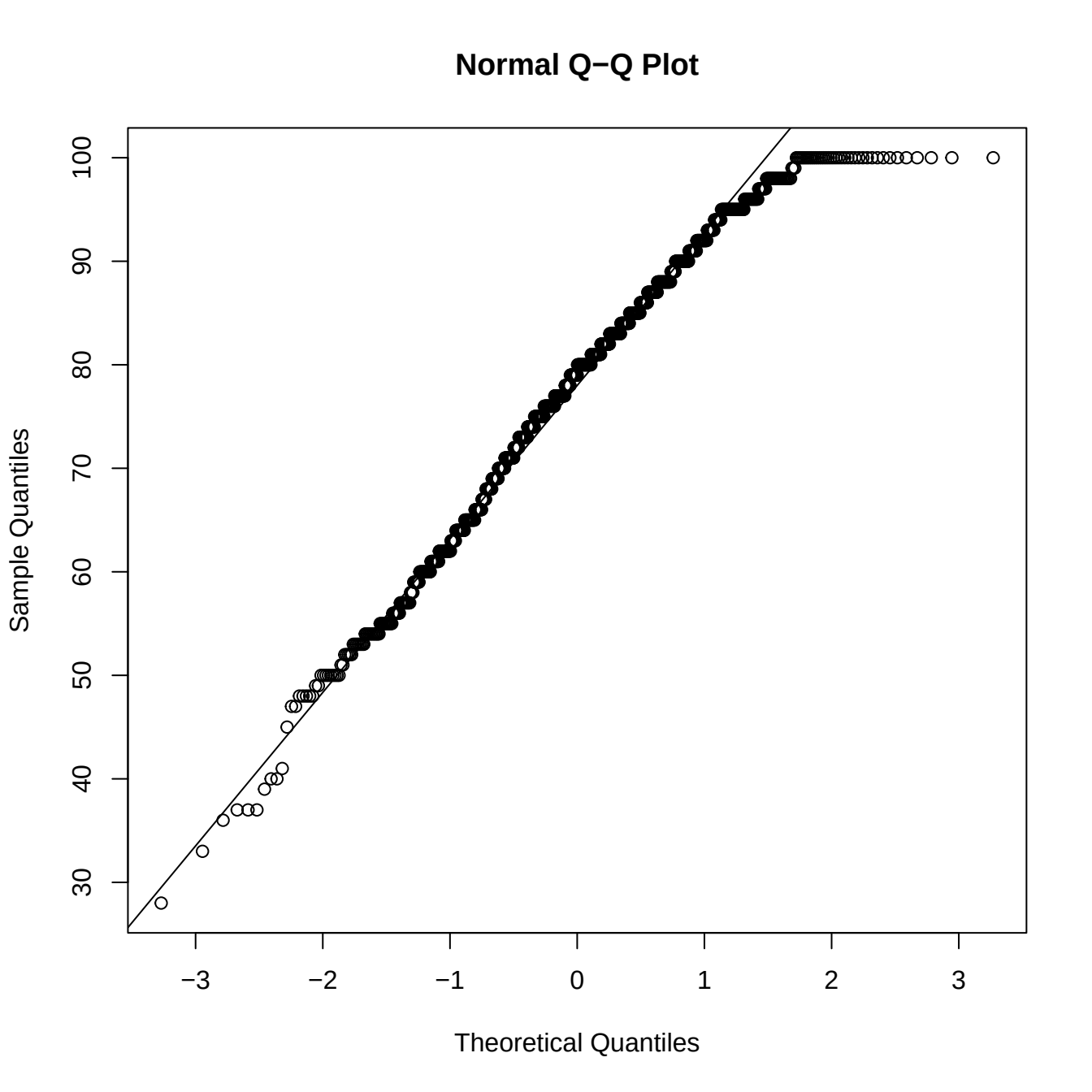

Histogram of data_M4CID0$TEST
Frequency
0
50
100
150
200
20
40
60
80
100
data_M4CID0$TEST

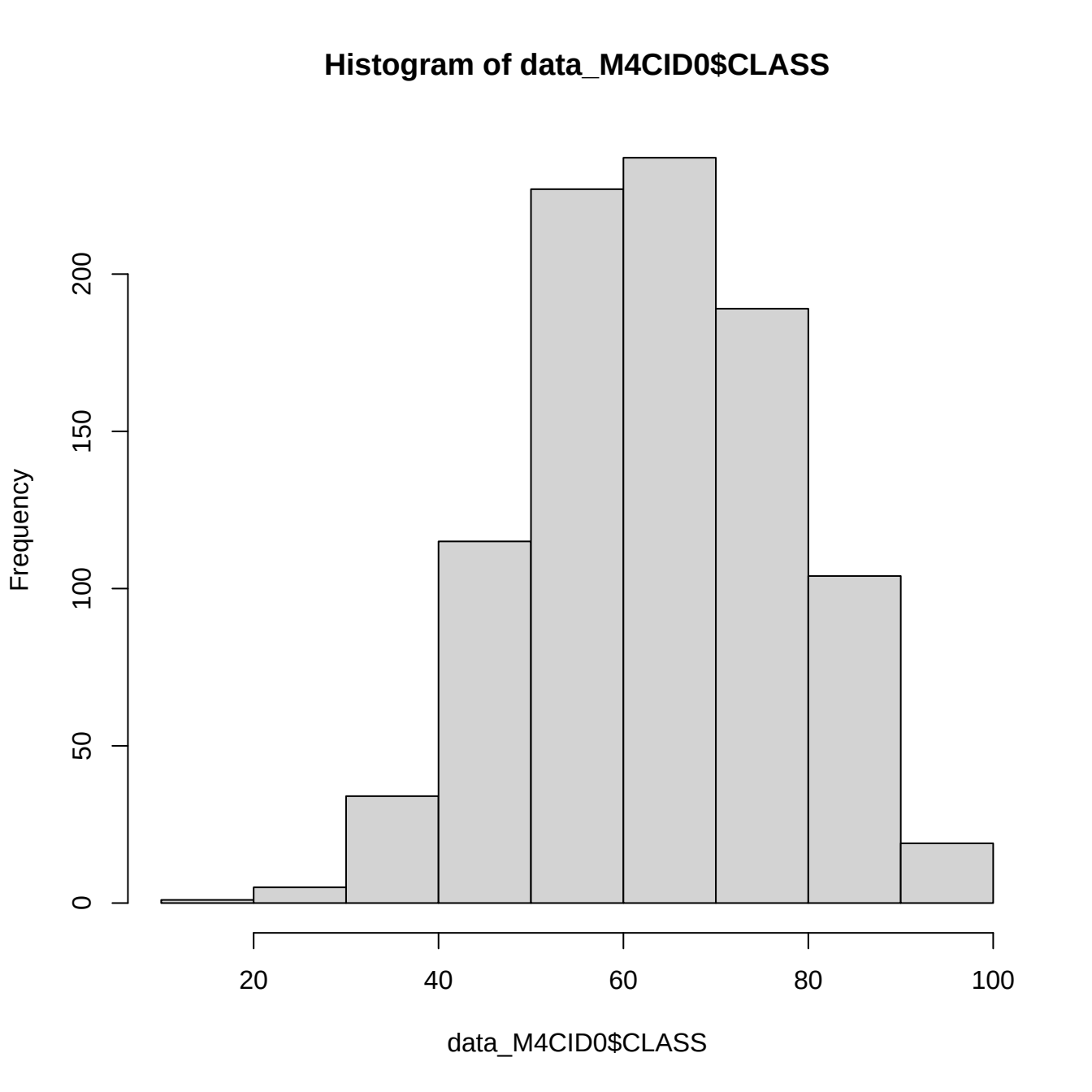

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3

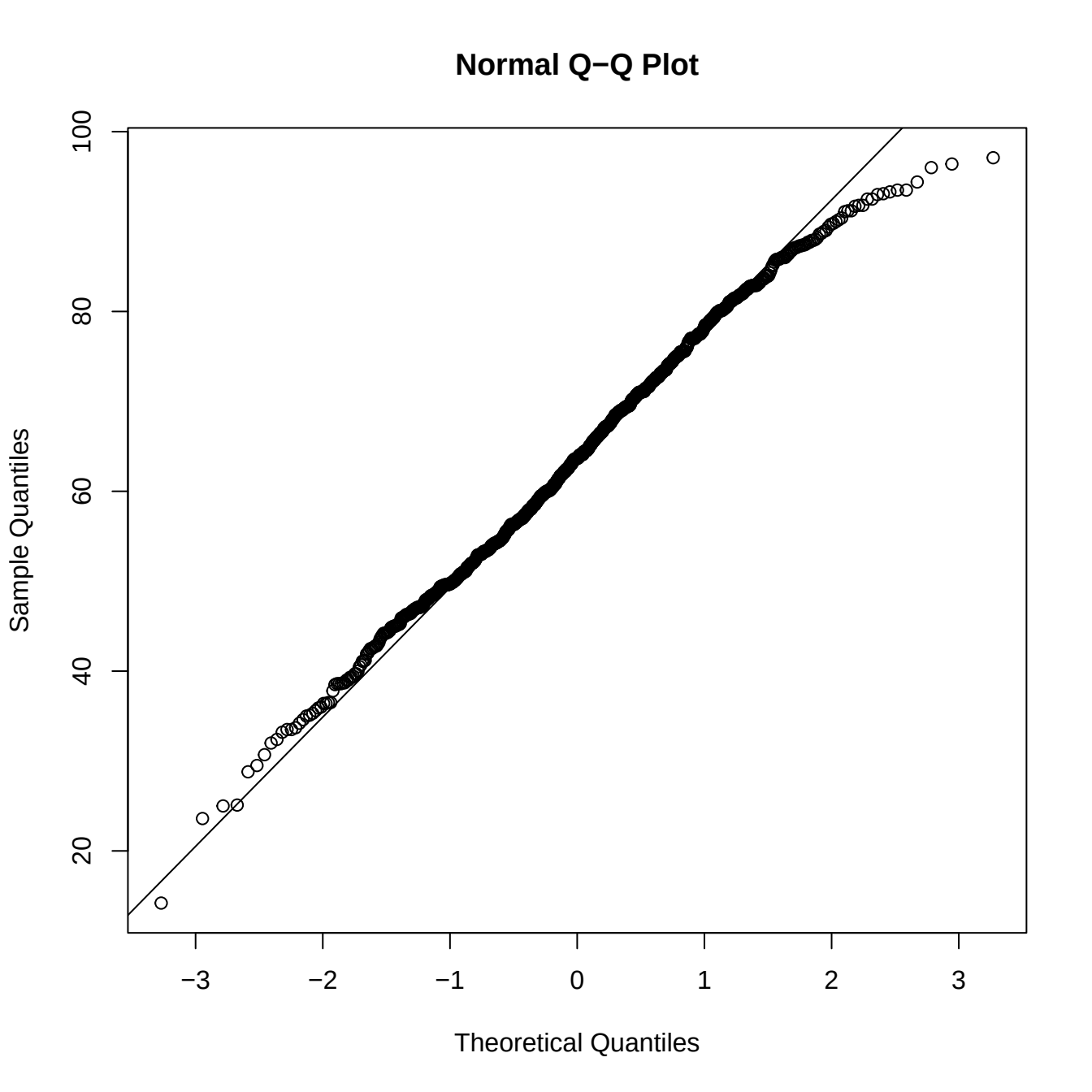

Histogram of data_M4CID0$LAB
Frequency
0
50
100
150
200
0
20
40
60
80
100
data_M4CID0$LAB

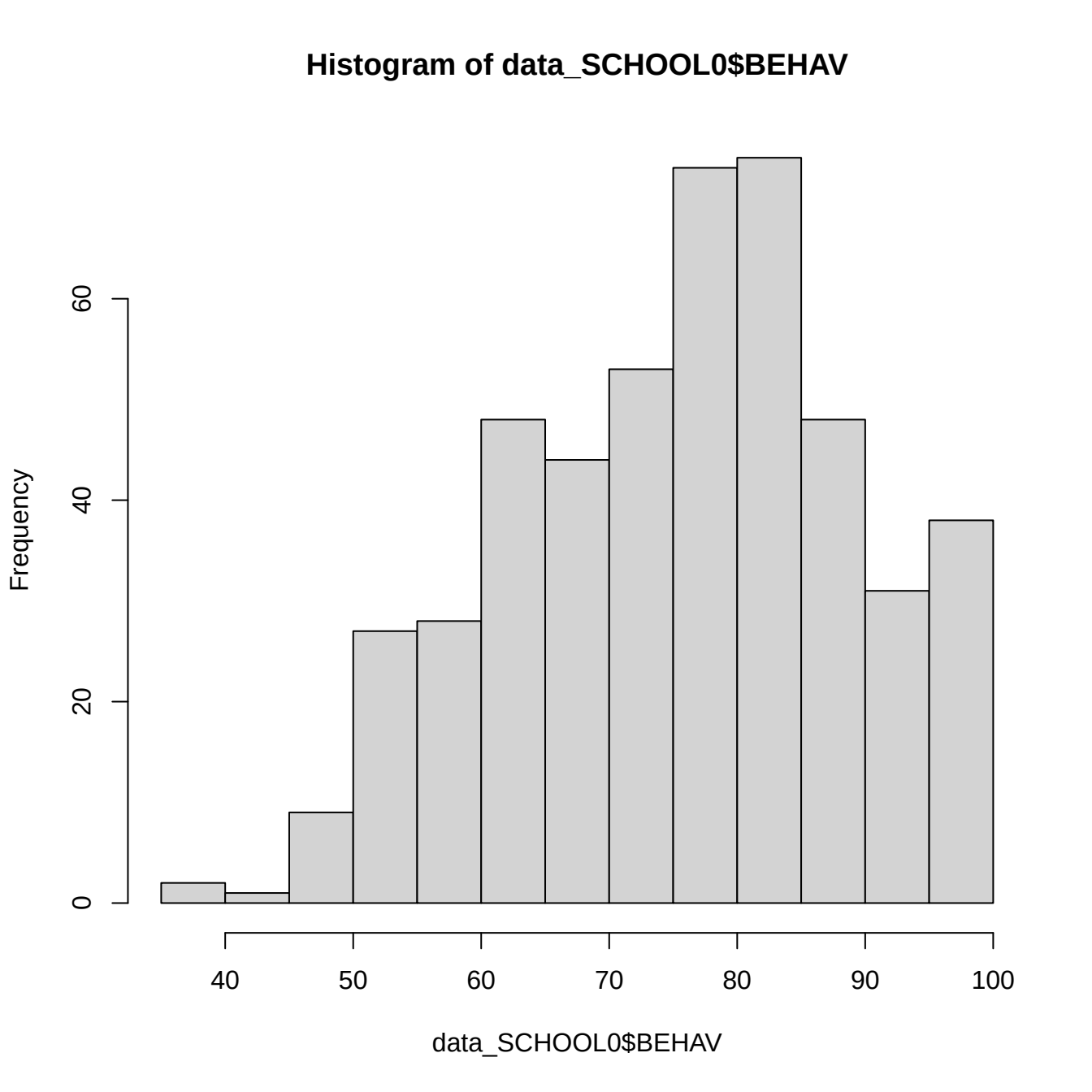

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
0
20
40
60
80
100
−3
−2
−1
0
1
2
3

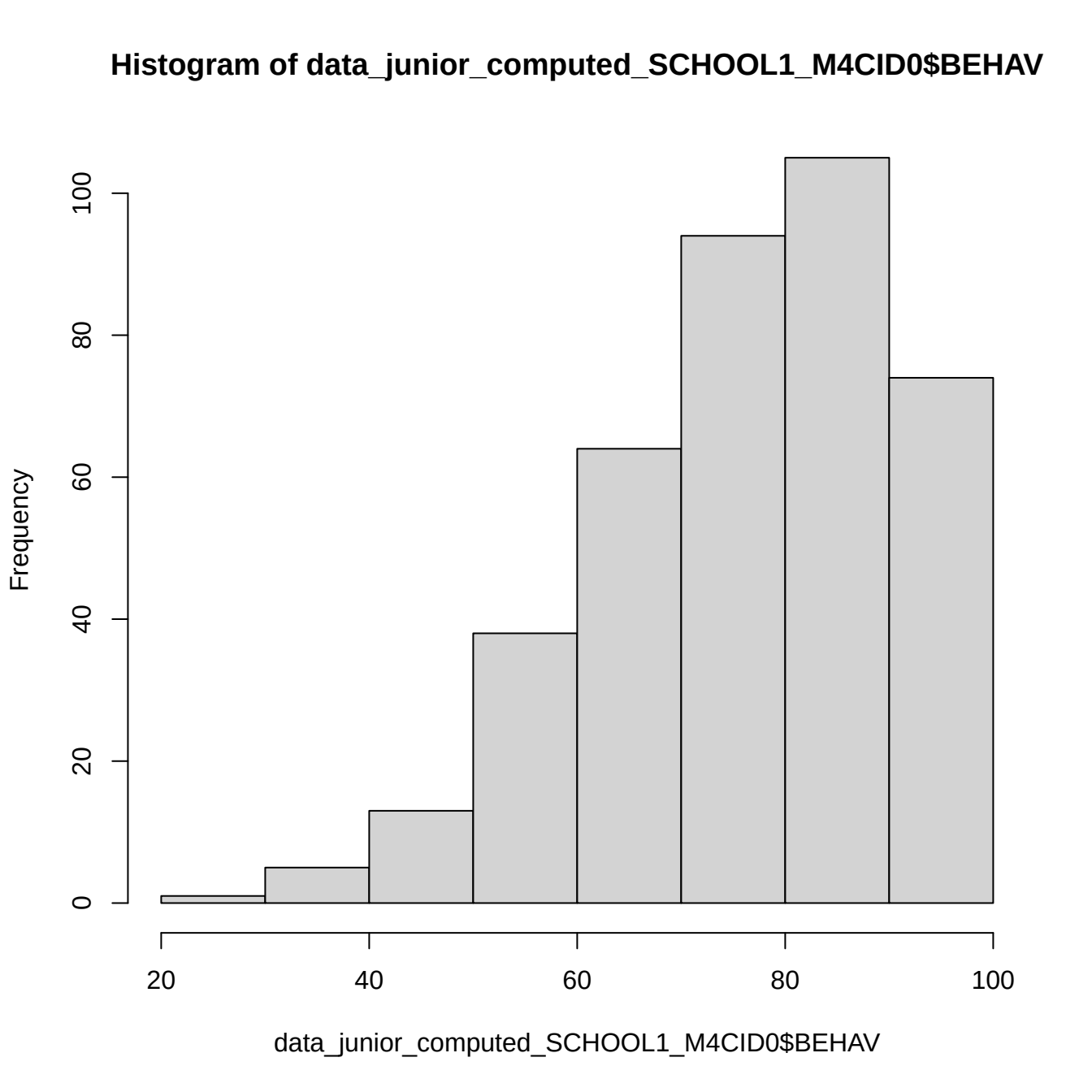

Histogram of data_M4CID0$BEHAV
Frequency
0
20
40
60
80
100
120
140
40
60
80
100
data_M4CID0$BEHAV

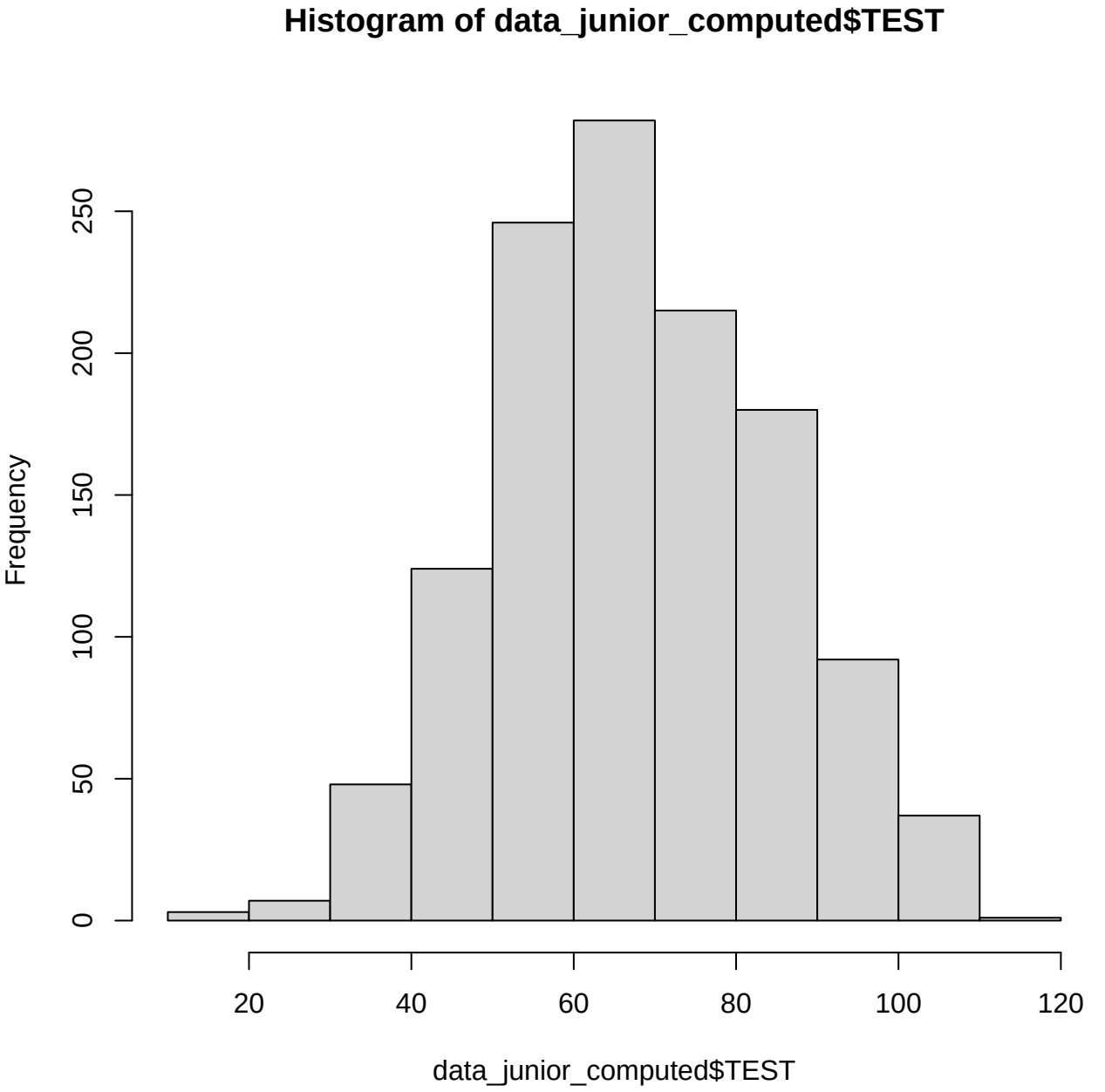

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
30
40
50
60
70
80
90
100
−3
−2
−1
0
1
2
3

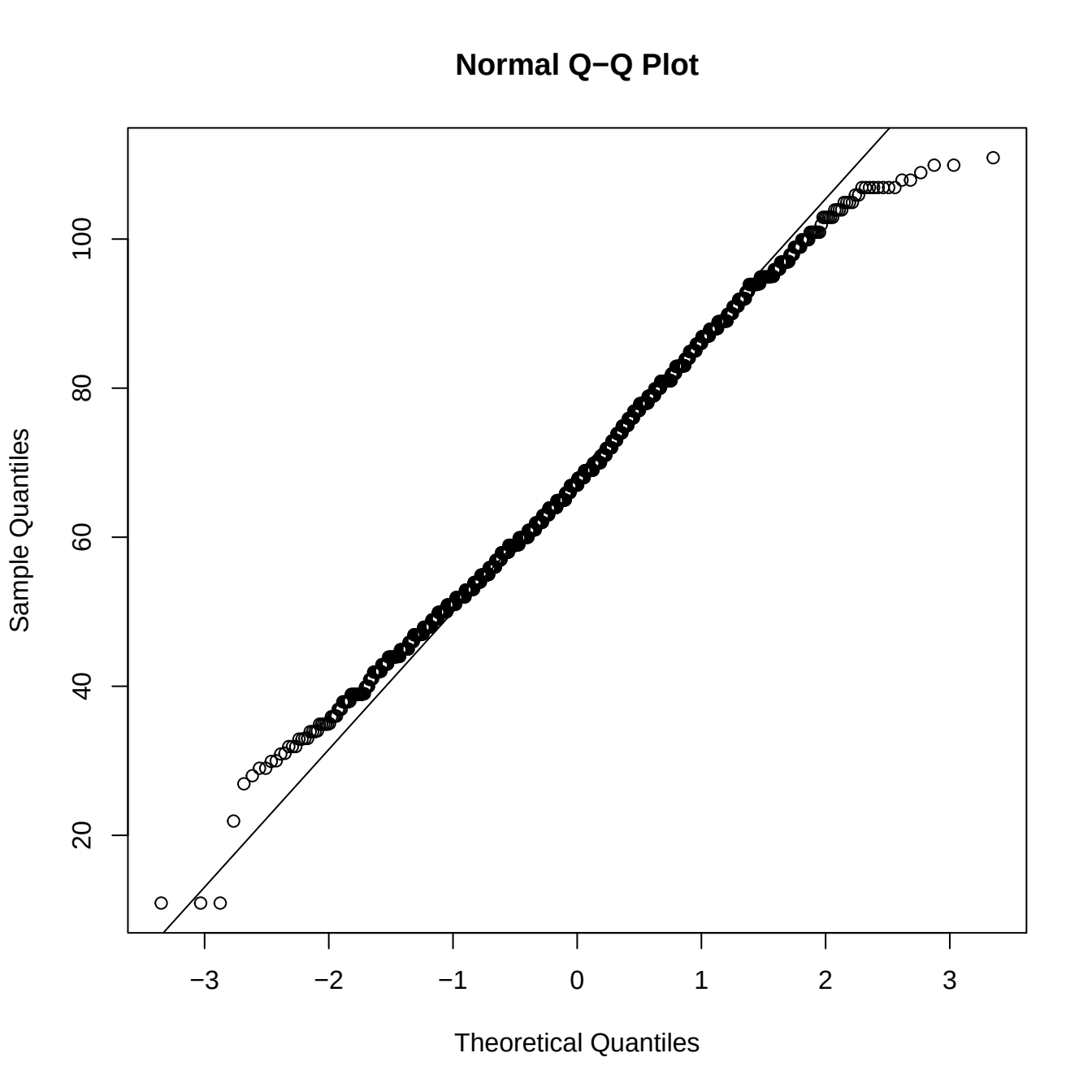

Histogram of data_M4CID0$CLASS
Frequency
0
50
100
150
200
20
40
60
80
100
data_M4CID0$CLASS

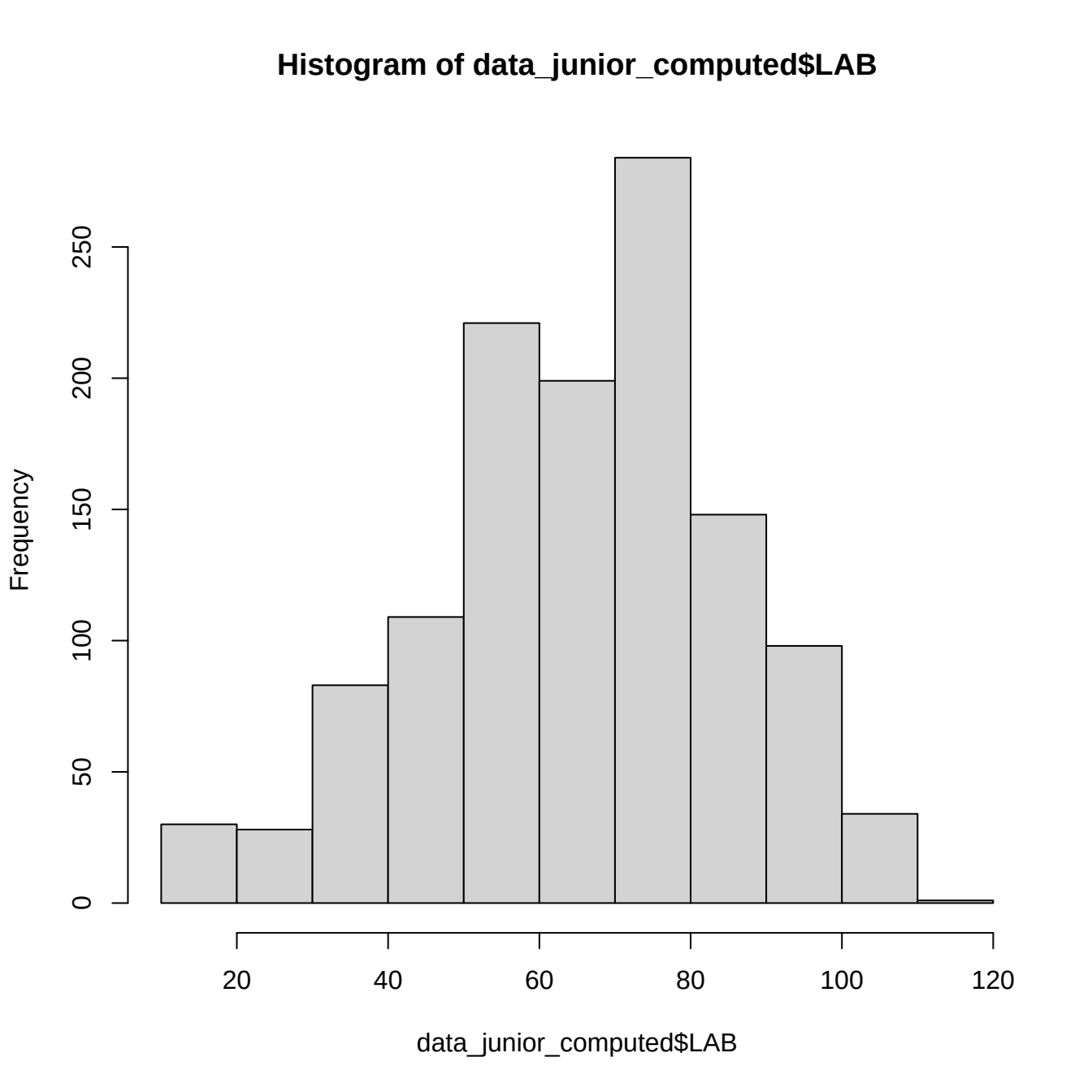

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3

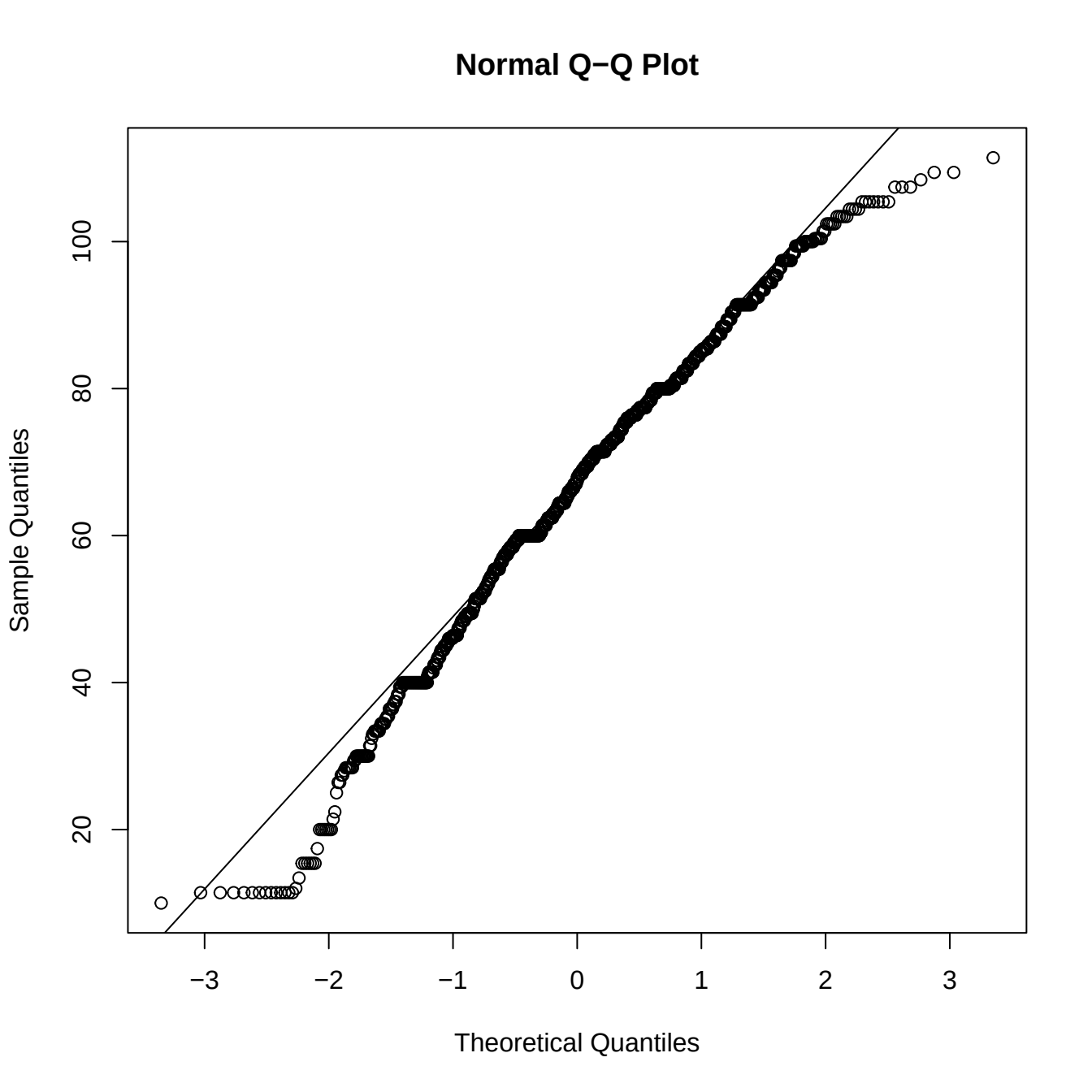

Histogram of data_SCHOOL0$BEHAV
Frequency
0
20
40
60
40
50
60
70
80
90
100
data_SCHOOL0$BEHAV

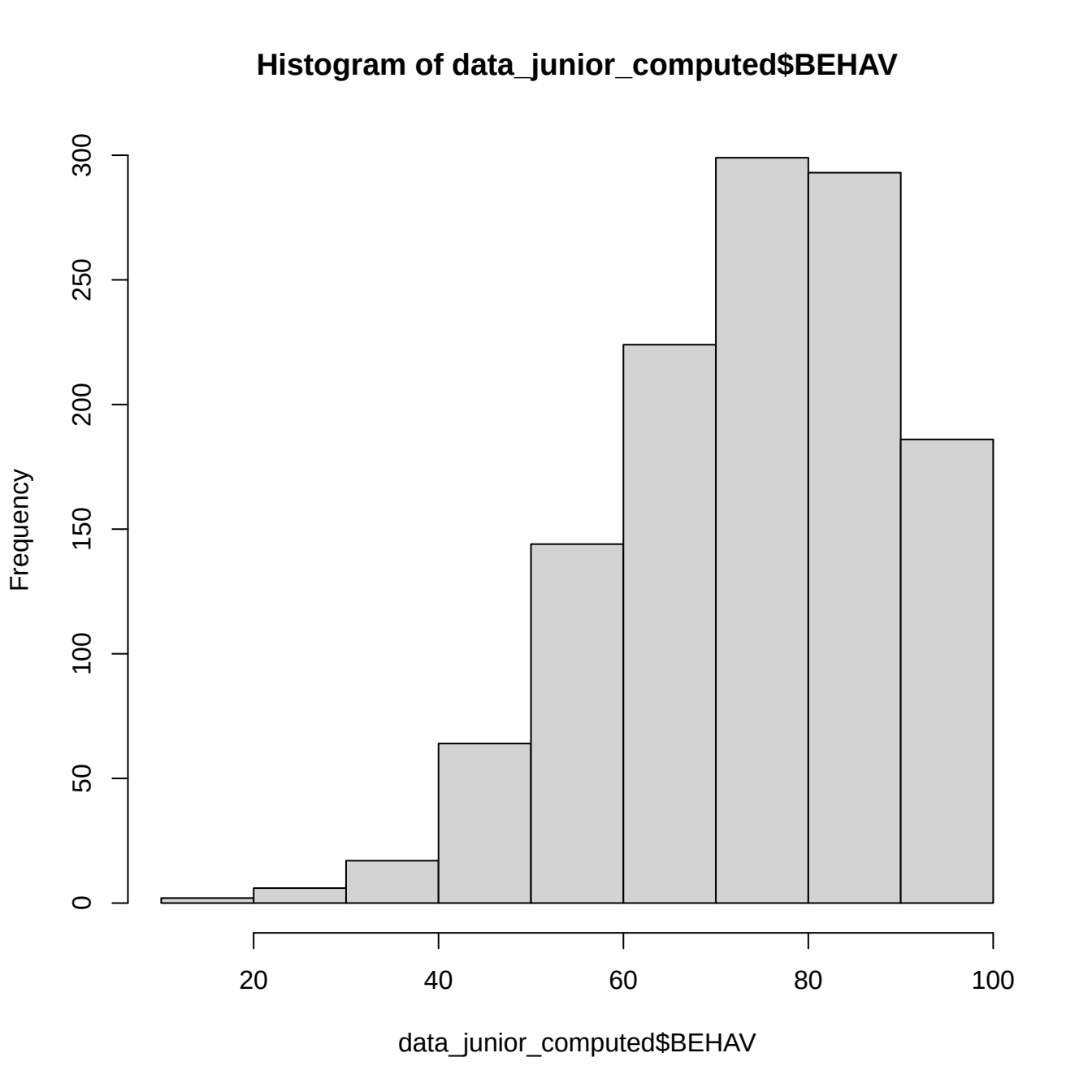

Histogram of data_junior_computed_SCHOOL1_M4CID0$BEHAV
Frequency
0
20
40
60
80
100
20
40
60
80
100
data_junior_computed_SCHOOL1_M4CID0$BEHAV

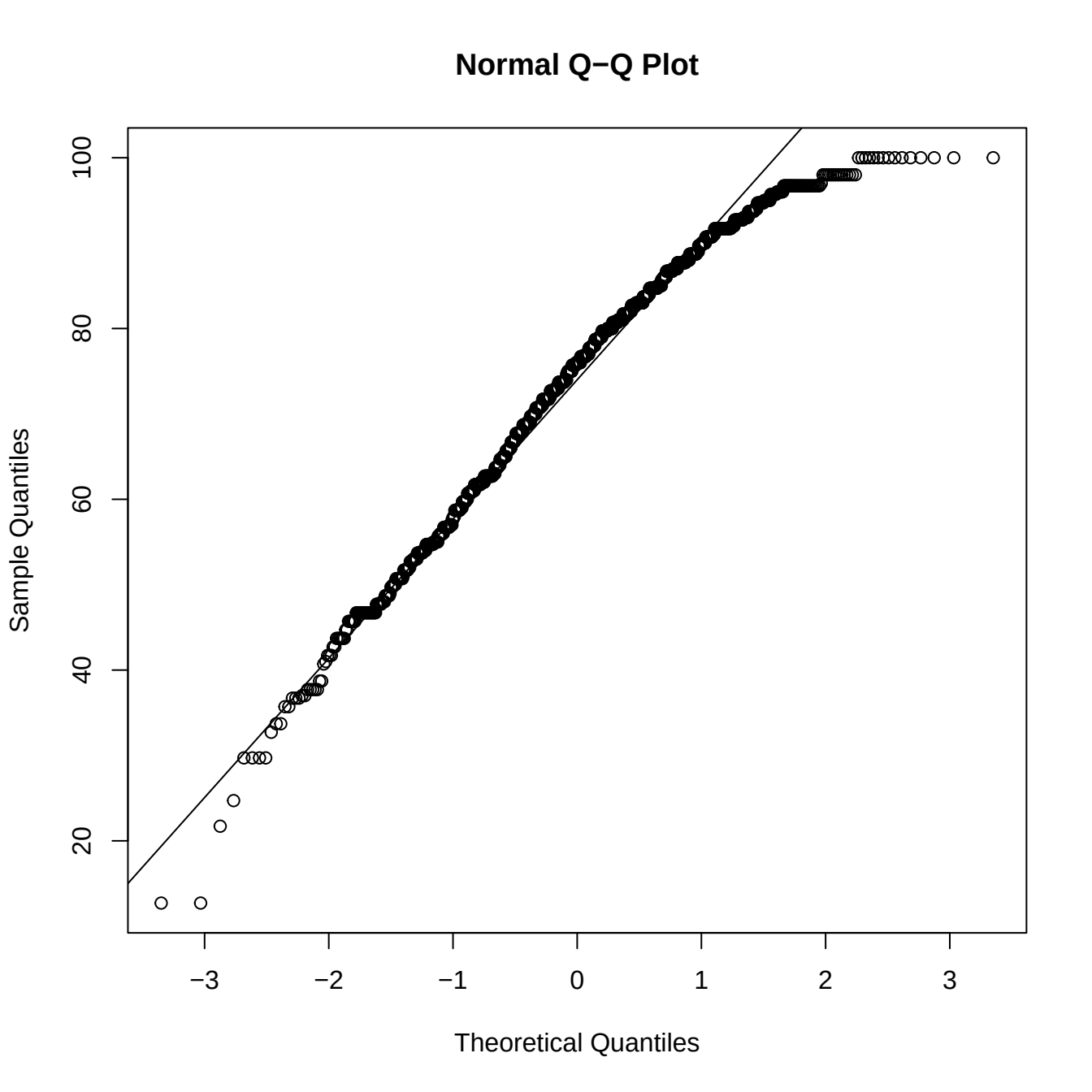

Histogram of data_junior_computed$TEST
Frequency
0
50
100
150
200
250
20
40
60
80
100
120
data_junior_computed$TEST

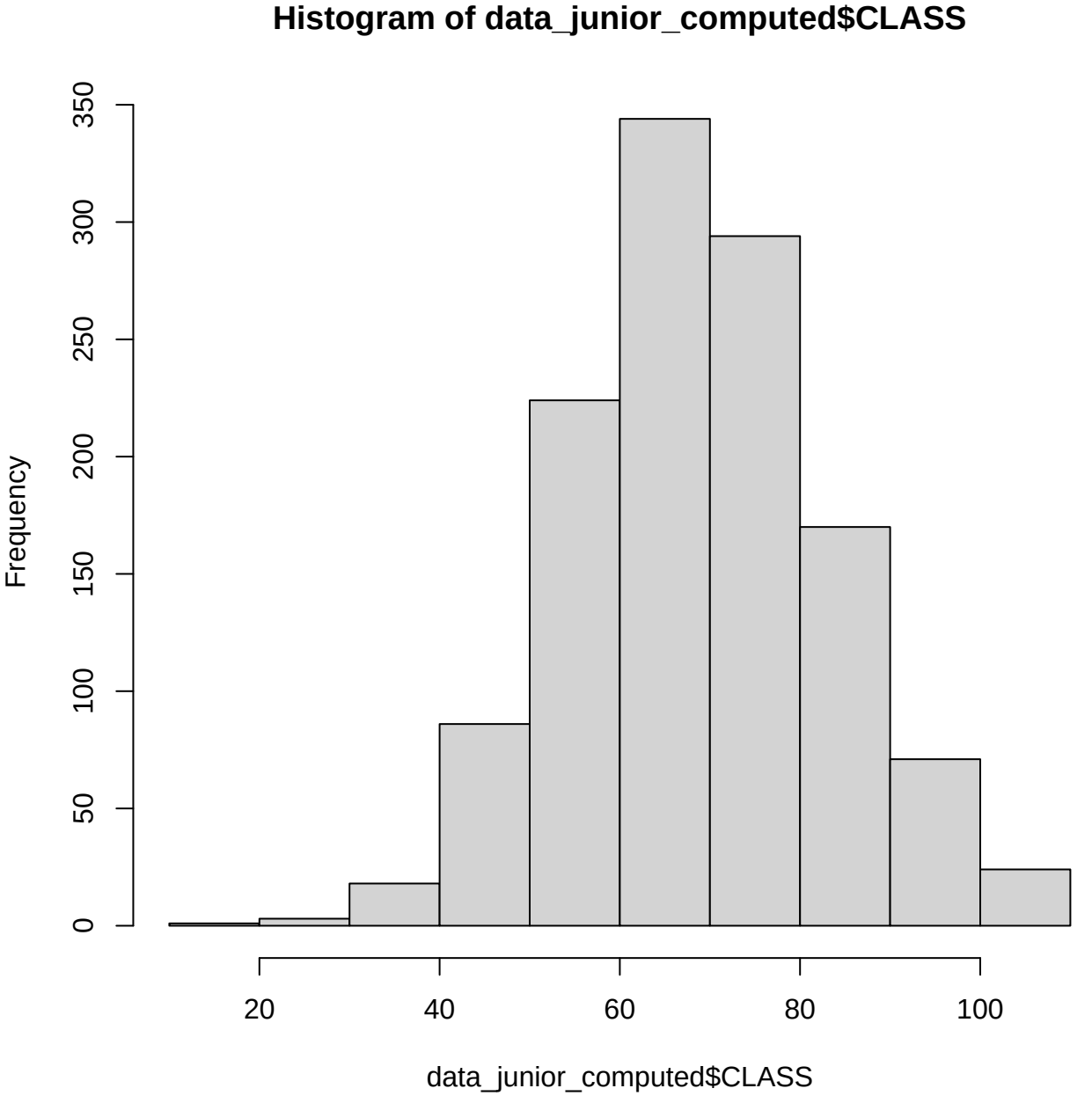

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3

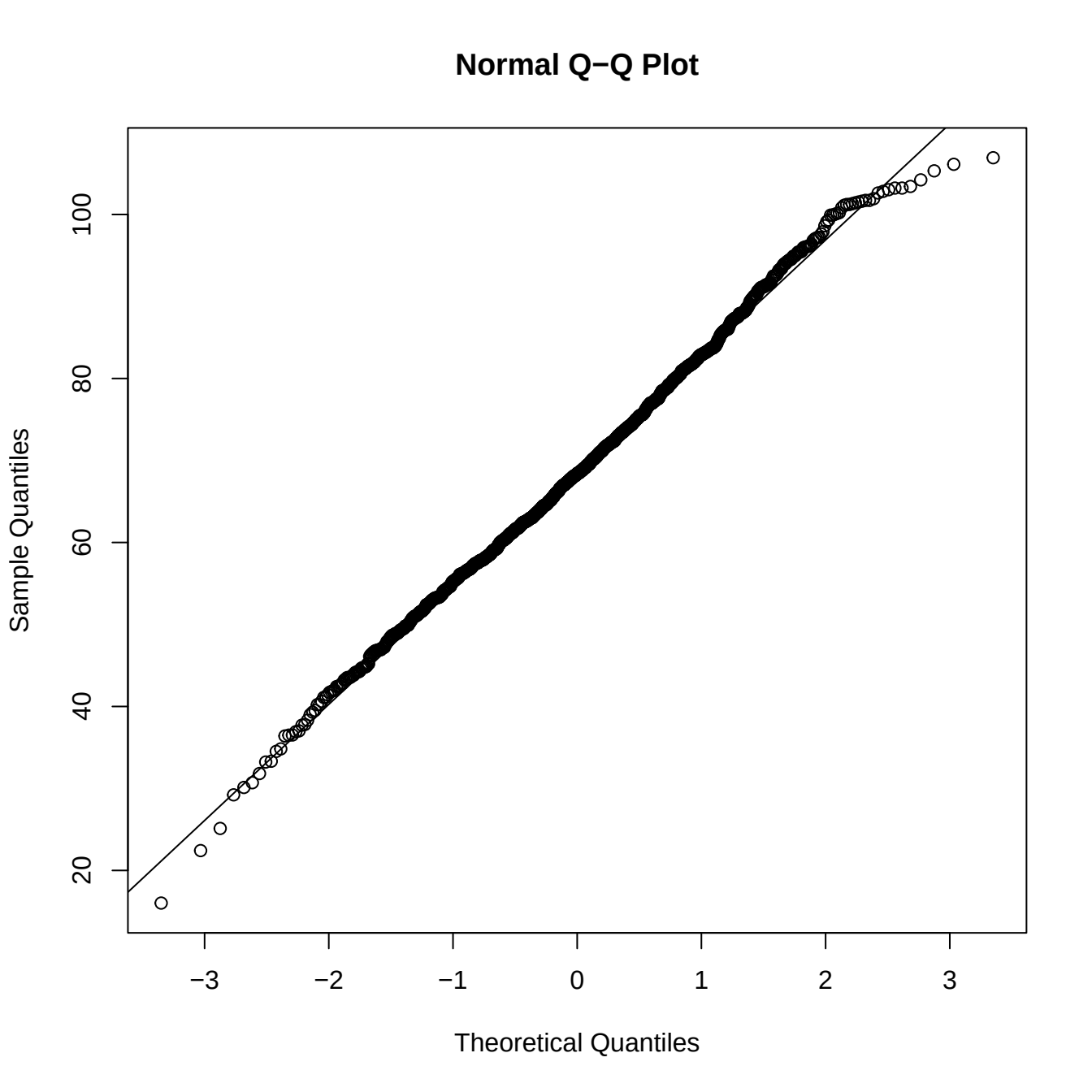

Histogram of data_junior_computed$LAB
Frequency
0
50
100
150
200
250
20
40
60
80
100
120
data_junior_computed$LAB

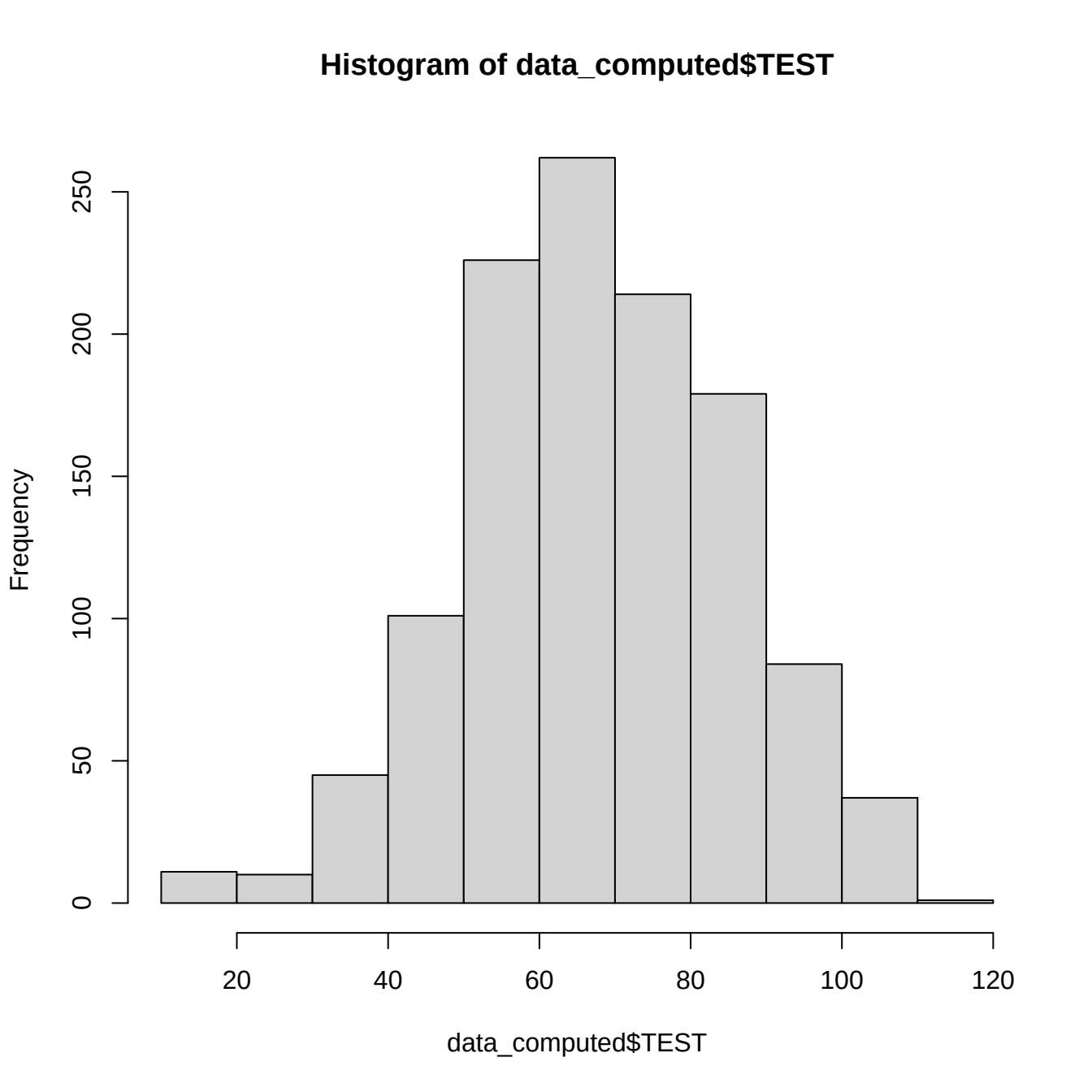

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3

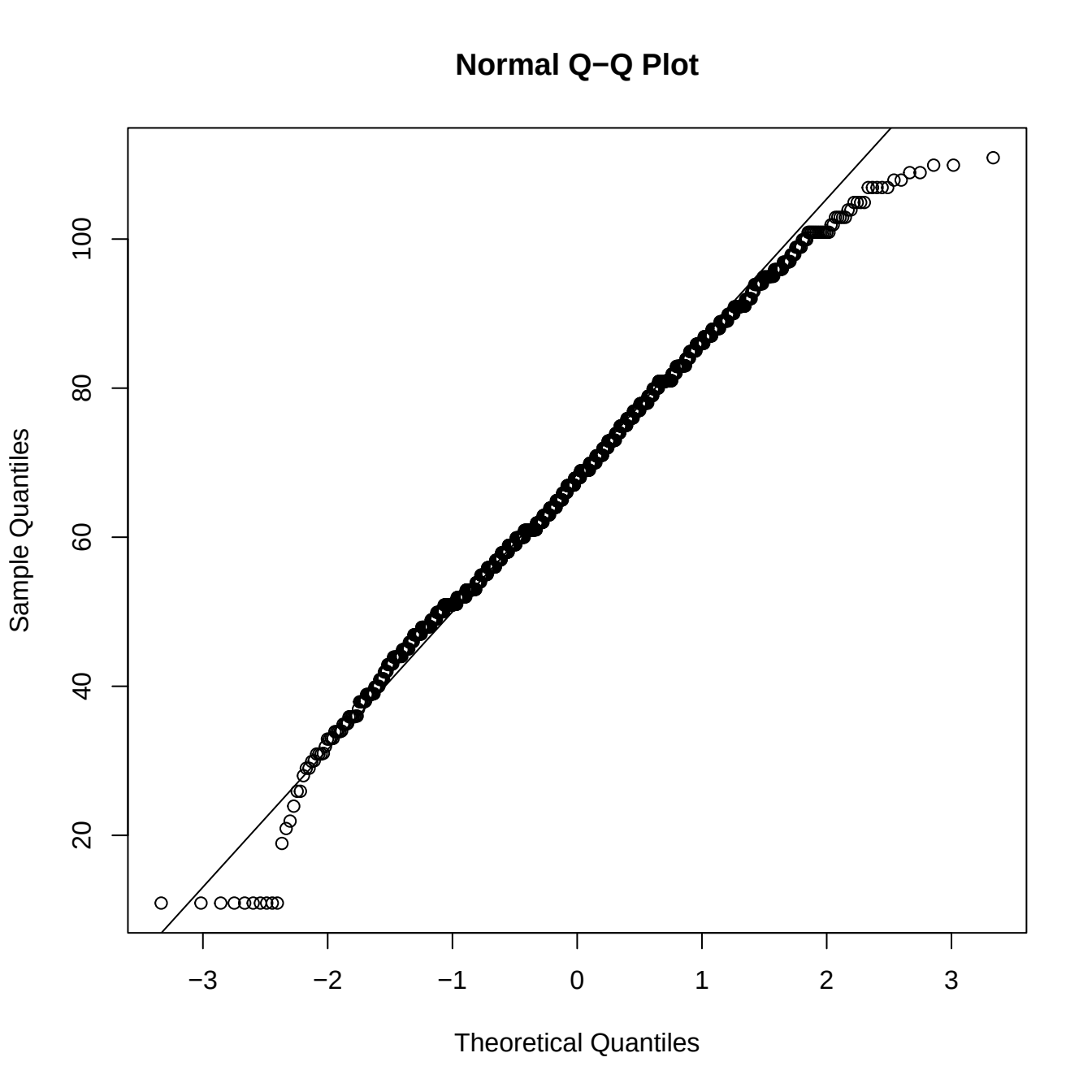

Histogram of data_junior_computed$BEHAV
Frequency
0
50
100
150
200
250
300
20
40
60
80
100
data_junior_computed$BEHAV

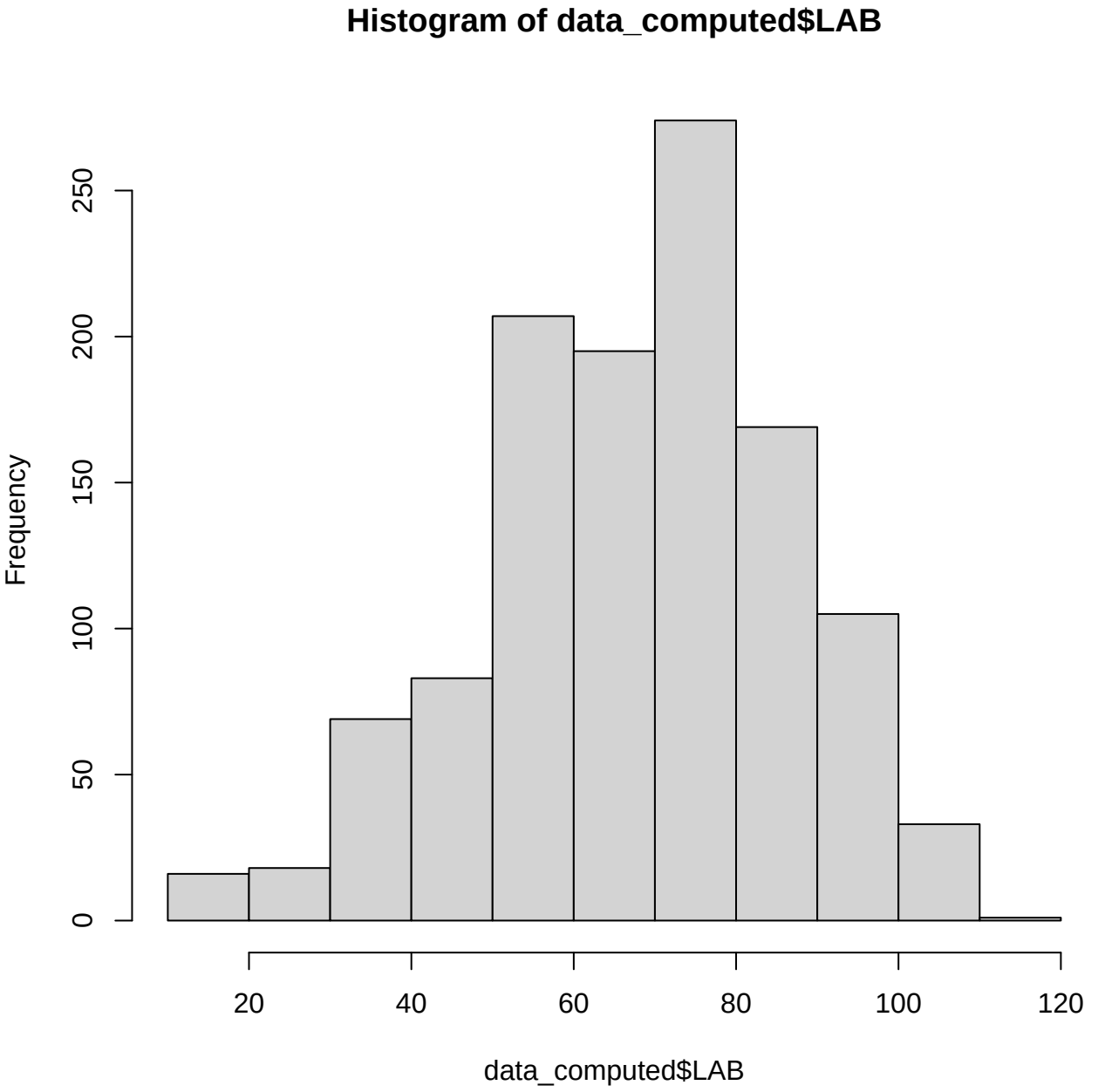

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3

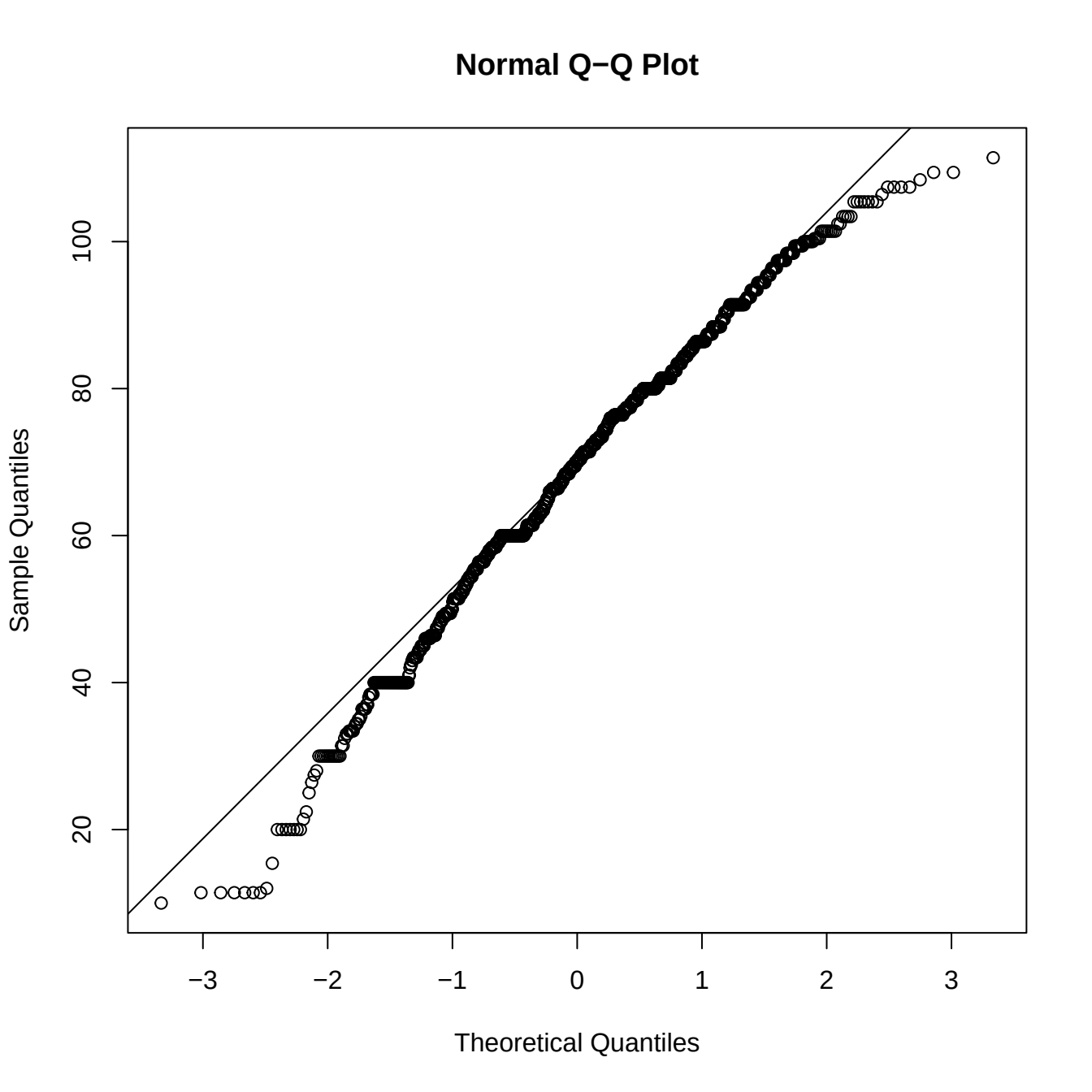

Histogram of data_junior_computed$CLASS
Frequency
0
50
100
150
200
250
300
350
20
40
60
80
100
data_junior_computed$CLASS

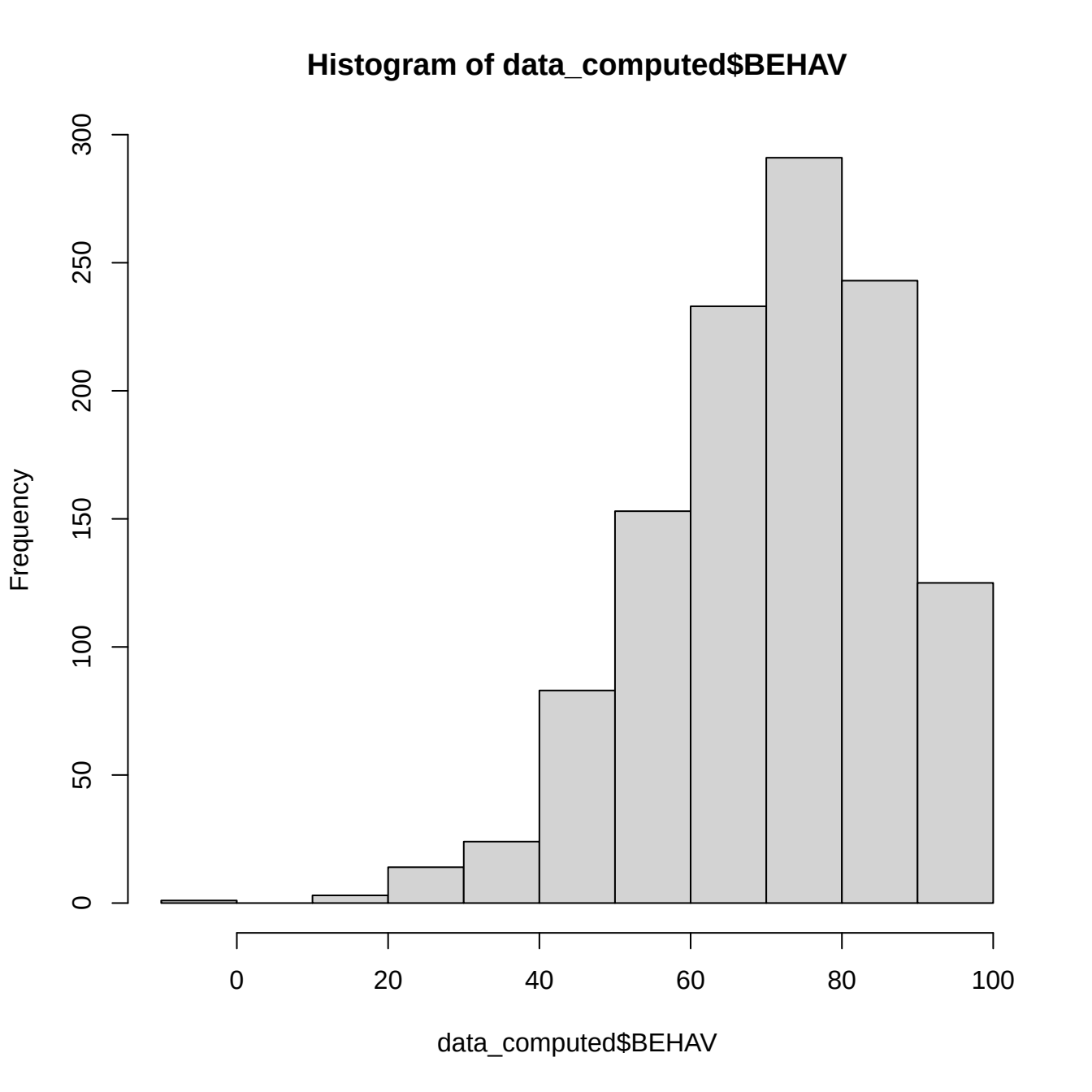

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3

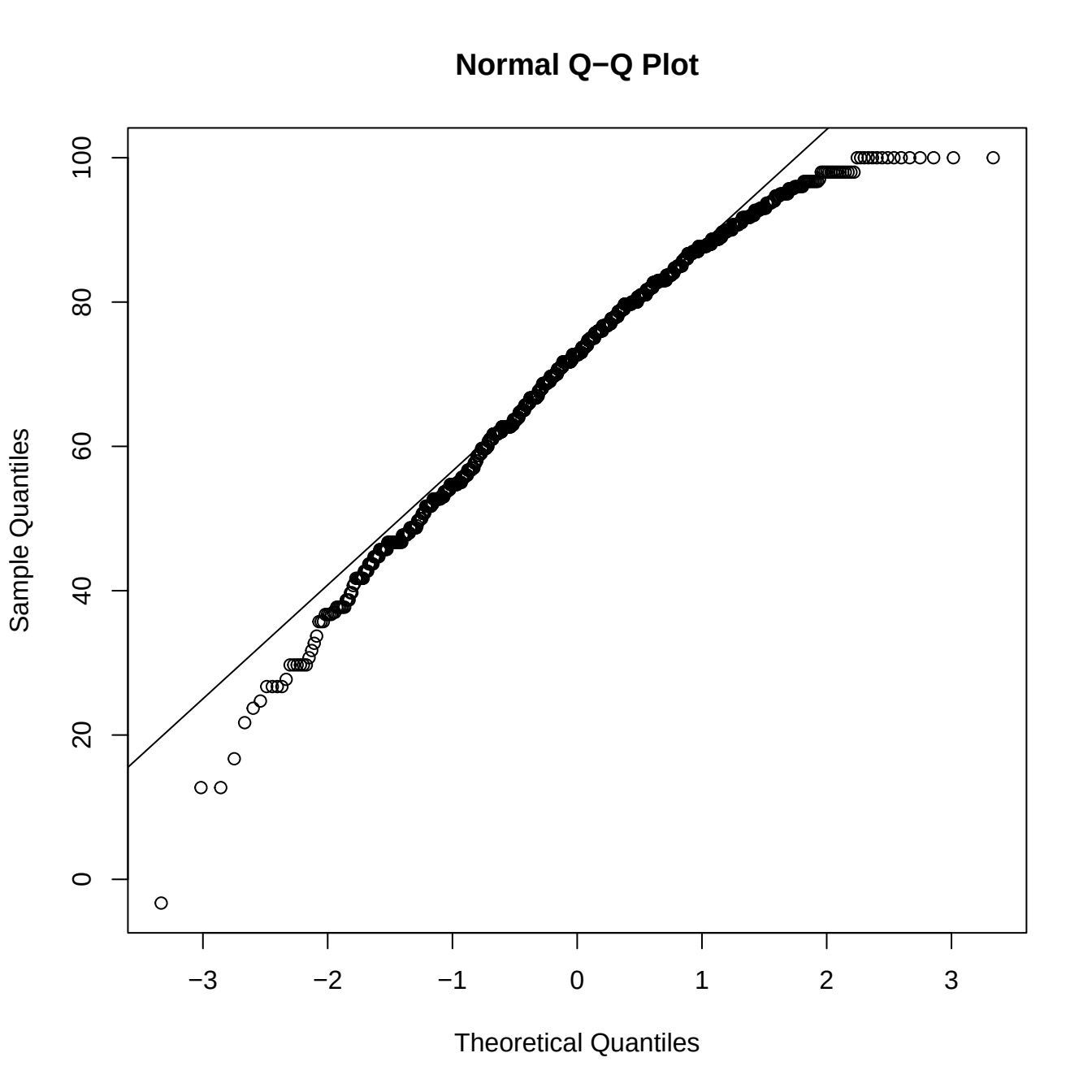

Histogram of data_computed$TEST
Frequency
0
50
100
150
200
250
20
40
60
80
100
120
data_computed$TEST

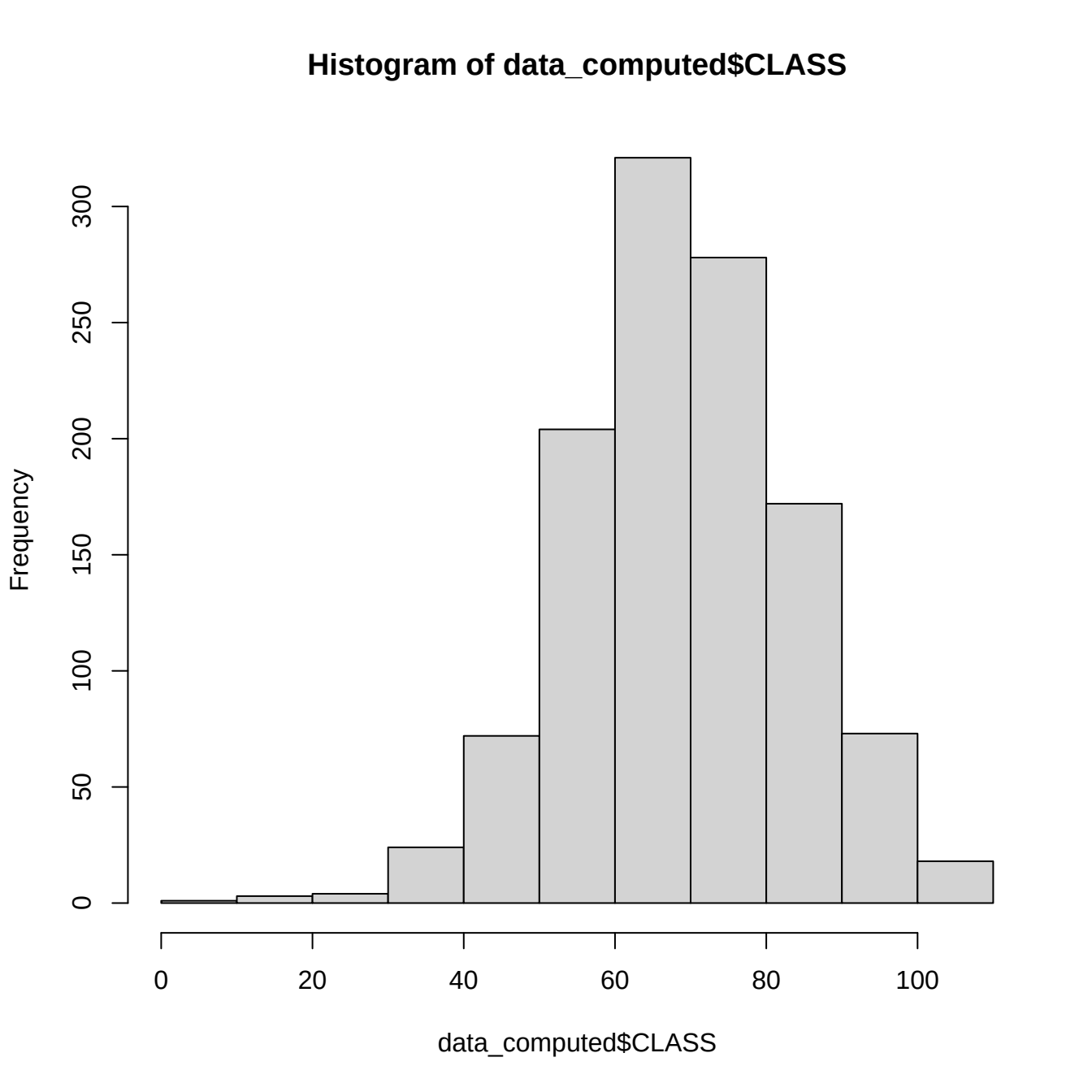

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3

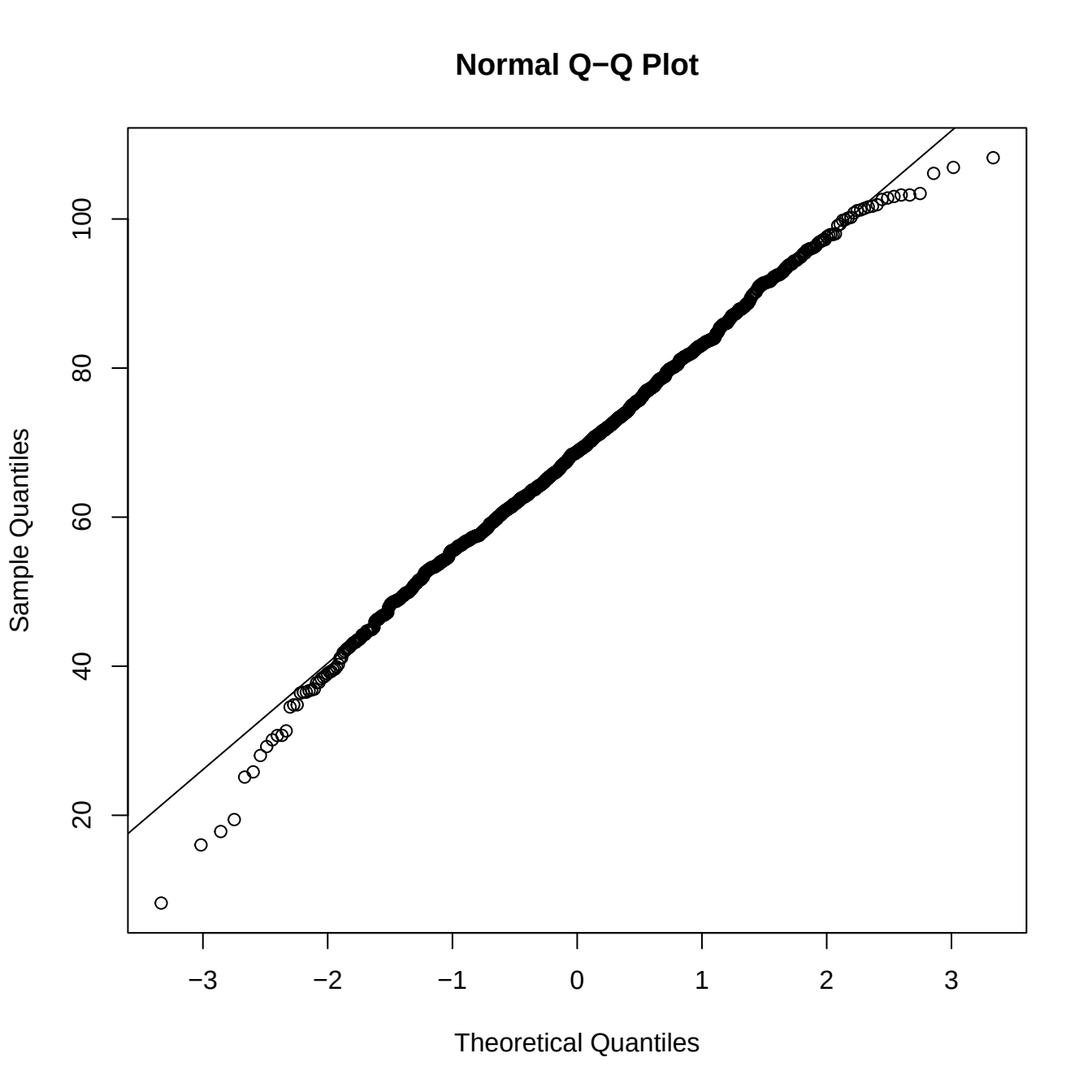

Histogram of data_computed$LAB
Frequency
0
50
100
150
200
250
20
40
60
80
100
120
data_computed$LAB


Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3


Histogram of data_computed$BEHAV
Frequency
0
50
100
150
200
250
300
0
20
40
60
80
100
data_computed$BEHAV


Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
0
20
40
60
80
100
−3
−2
−1
0
1
2
3


Histogram of data_computed$CLASS
Frequency
0
50
100
150
200
250
300
0
20
40
60
80
100
data_computed$CLASS


Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
20
40
60
80
100
−3
−2
−1
0
1
2
3