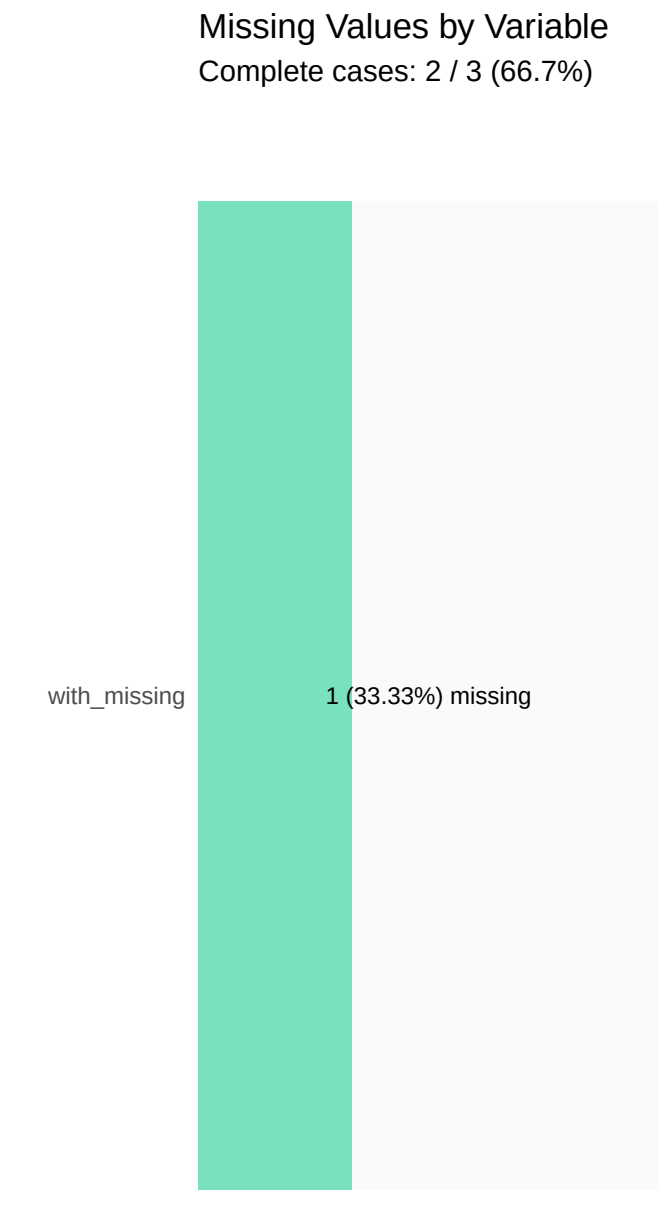
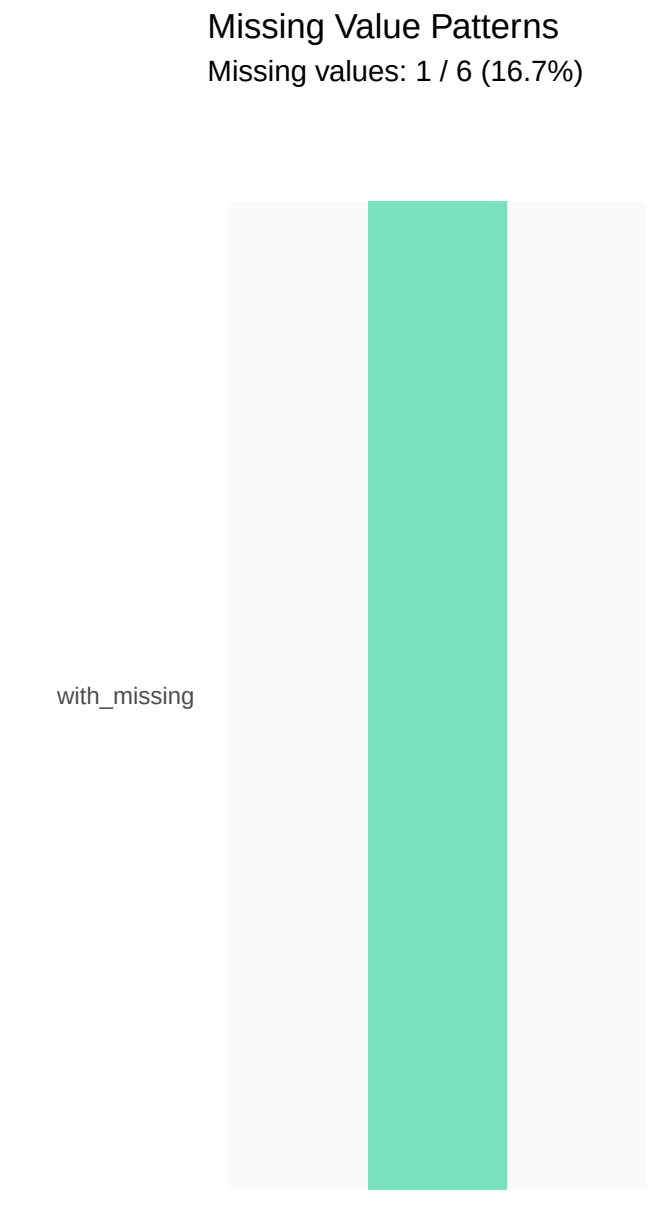

Missing Values by Variable
Complete cases: 2 / 5 (40.0%)
some_missing
2 (40%) missing
few_missing
1 (20%) missing
Missing Value Patterns
Missing values: 3 / 15 (20.0%)
some_missing
few_missing

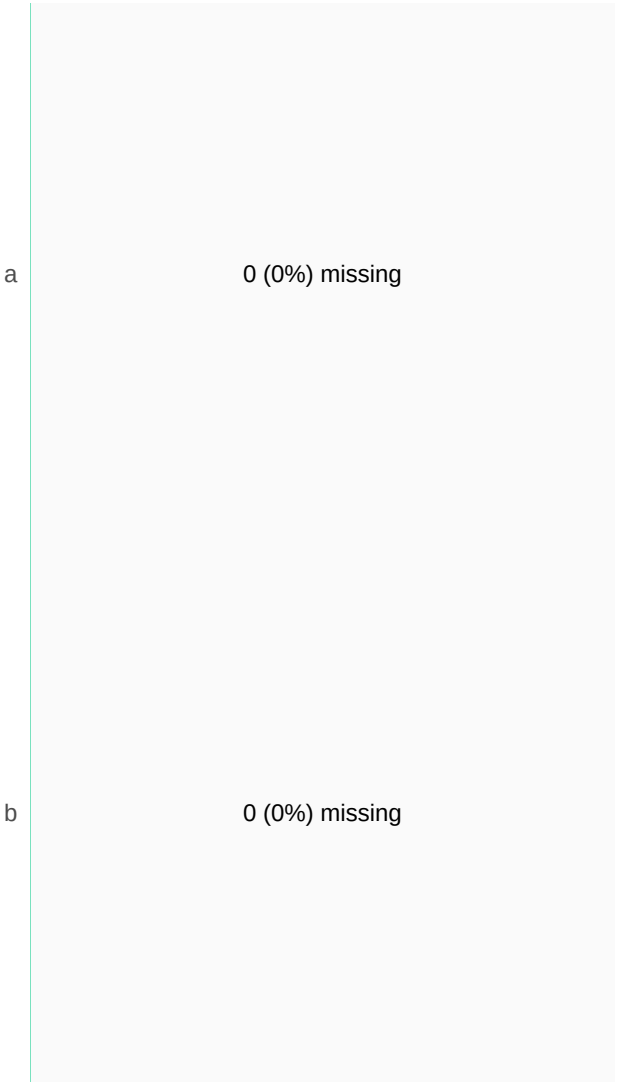

Missing Values by Variable
Complete cases: 2 / 3 (66.7%)
with_missing
1 (33.33%) missing


Missing Value Patterns
Missing values: 1 / 6 (16.7%)
with_missing


Missing Values by Variable
Complete cases: 2 / 3 (66.7%)
with_missing
1 (33.33%) missing
no_missing
0 (0%) missing
Missing Value Patterns
Missing values: 1 / 6 (16.7%)
with_missing
no_missing

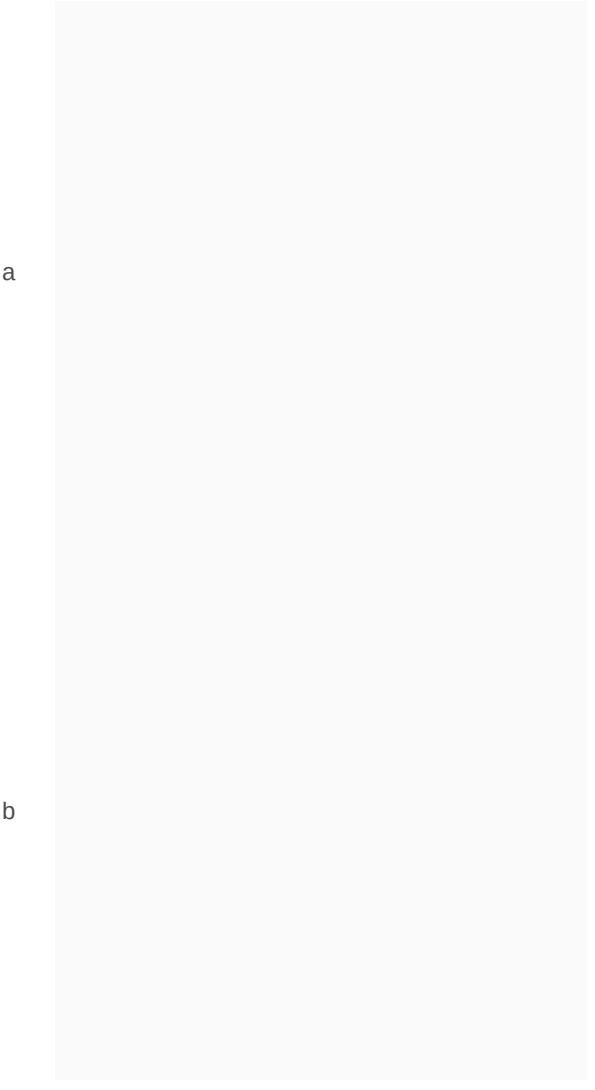
Missing Values by Variable

Complete cases: 3 / 3 (100.0%)

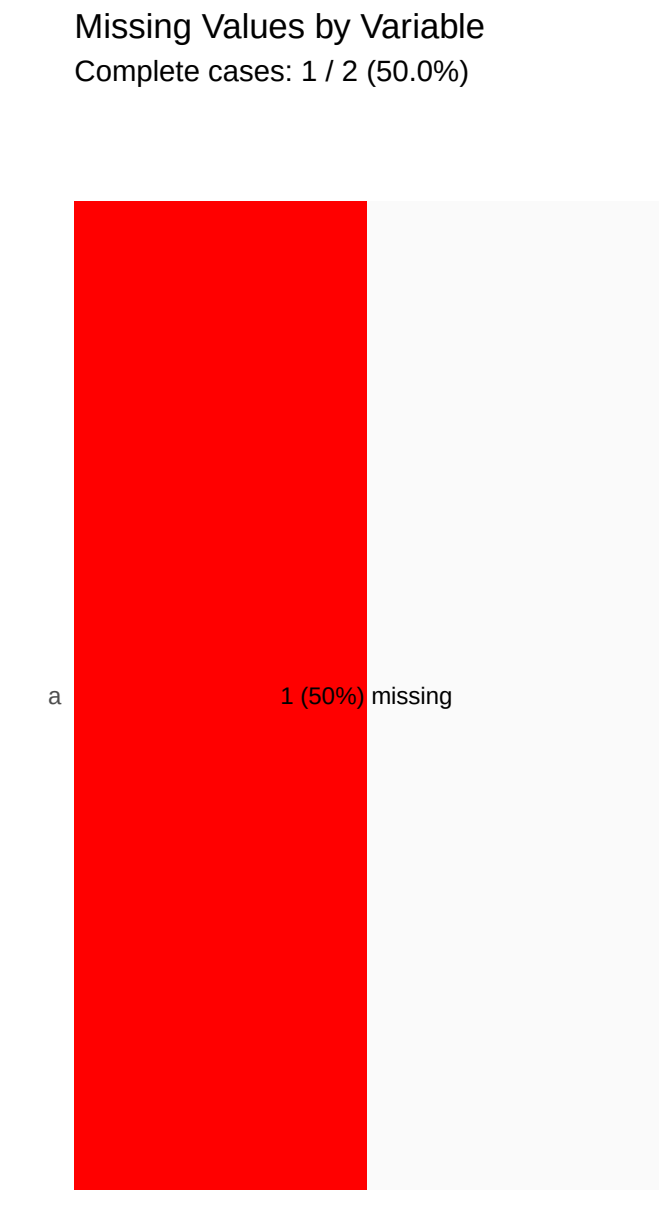


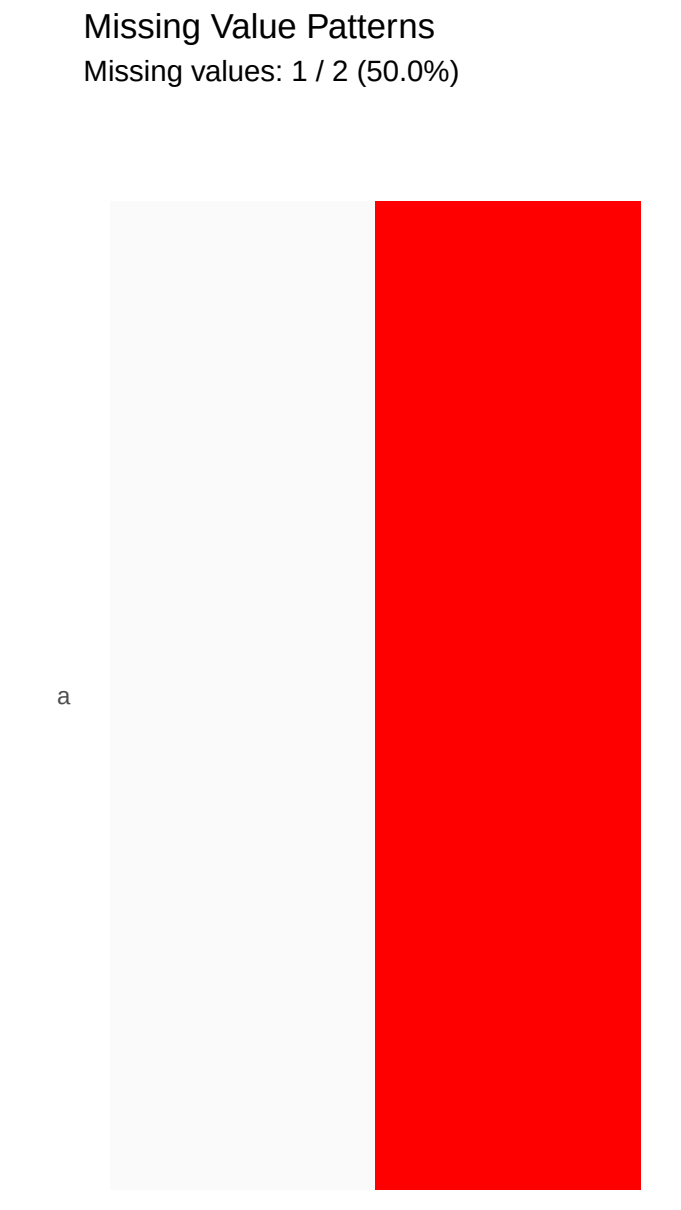
Missing Value Patterns

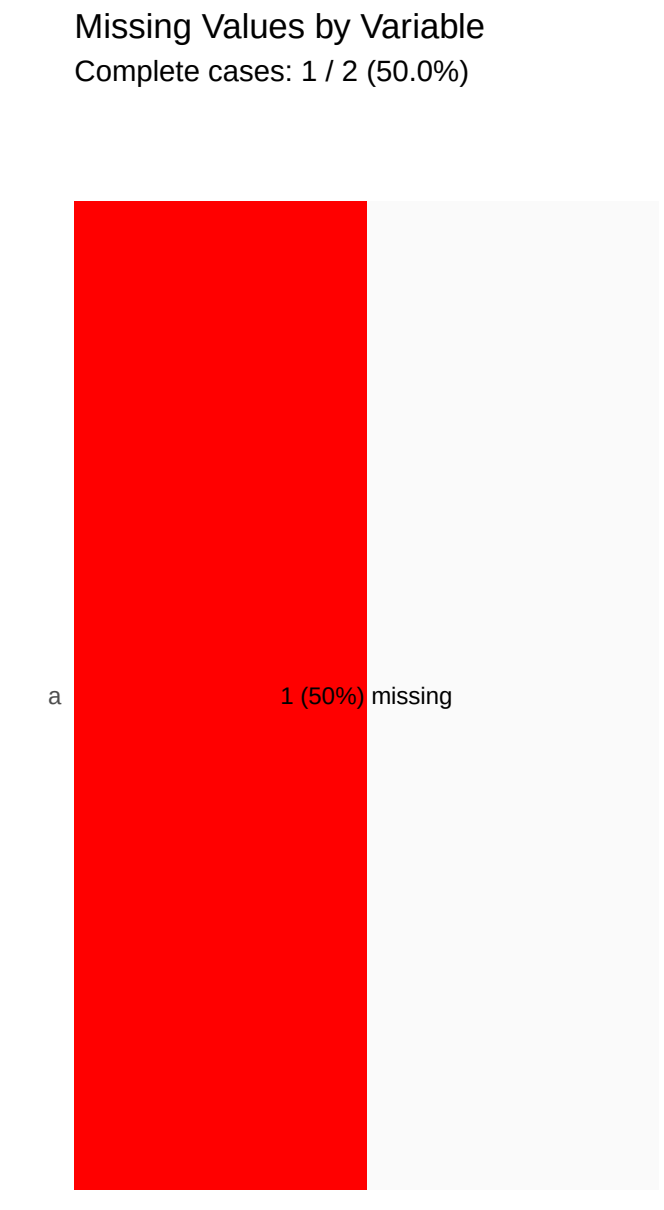
Missing values: 0 / 6 (0.0%)

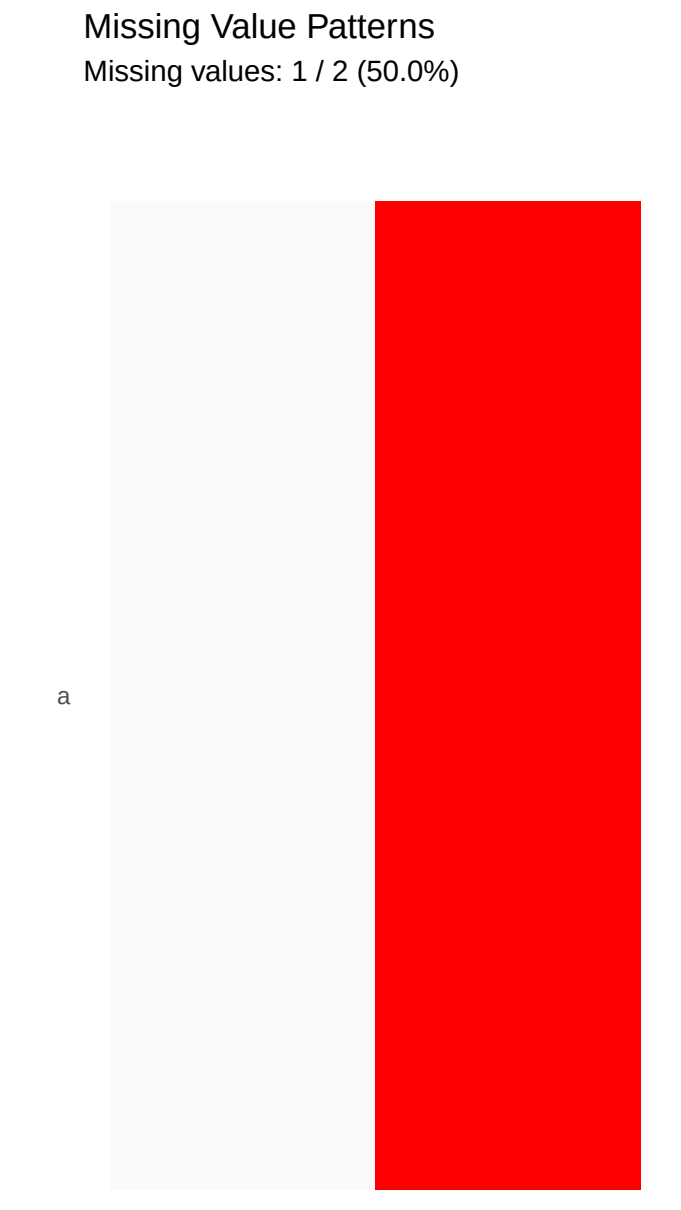


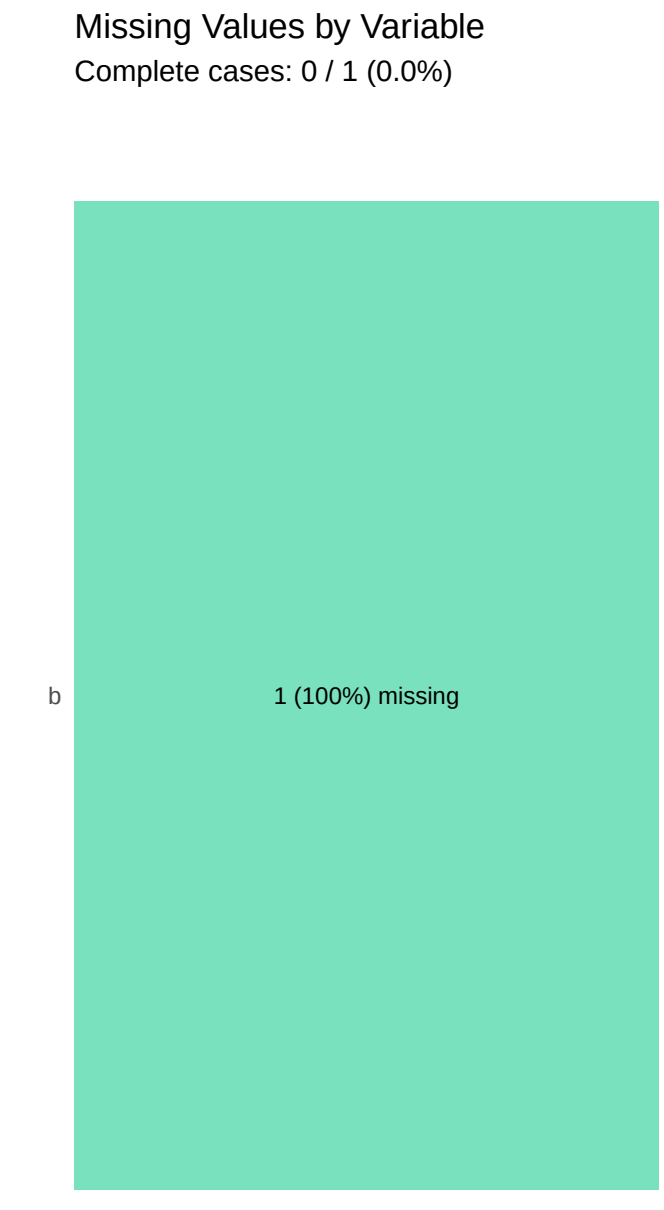

Missing Values by Variable
Complete cases: 1 / 2 (50.0%)
num
1 (50%) missing
int
1 (50%) missing
char
1 (50%) missing
factor
1 (50%) missing
logical
1 (50%) missing
Missing Value Patterns
Missing values: 5 / 10 (50.0%)
num
int
char
factor
logical

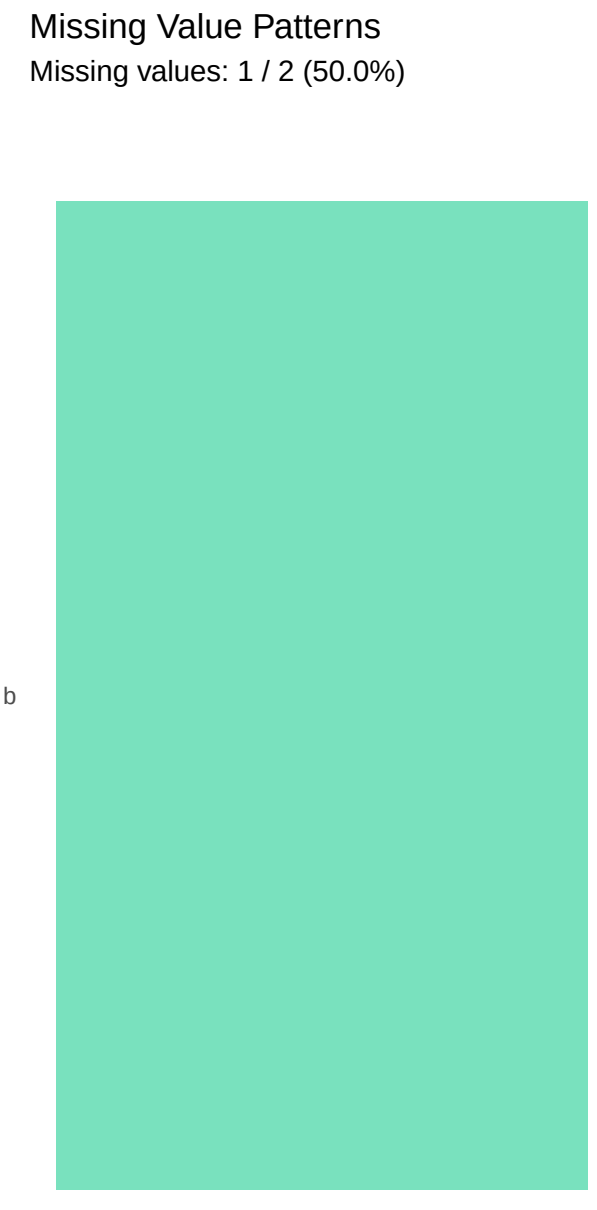

Missing Values by Variable
Complete cases: 1 / 2 (50.0%)
a
1 (50%) missing

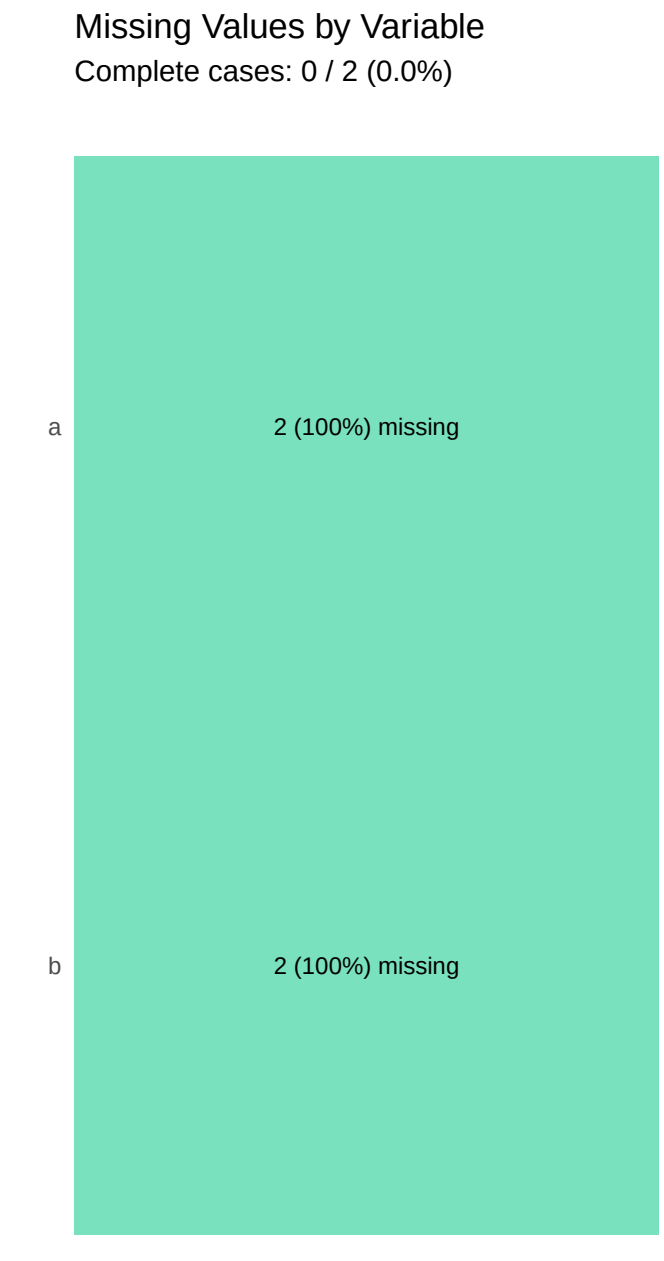

Missing Value Patterns
Missing values: 1 / 2 (50.0%)
a

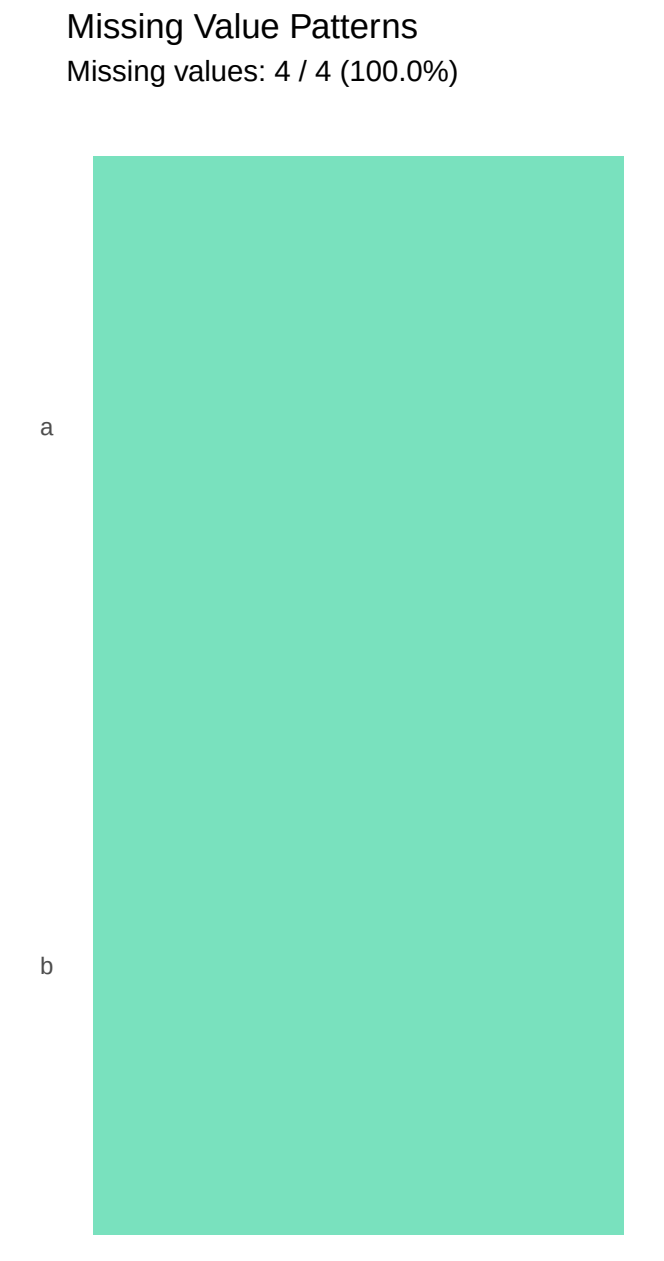

Missing Values by Variable
Complete cases: 1 / 2 (50.0%)
a
1 (50%) missing


Missing Value Patterns
Missing values: 1 / 2 (50.0%)
a

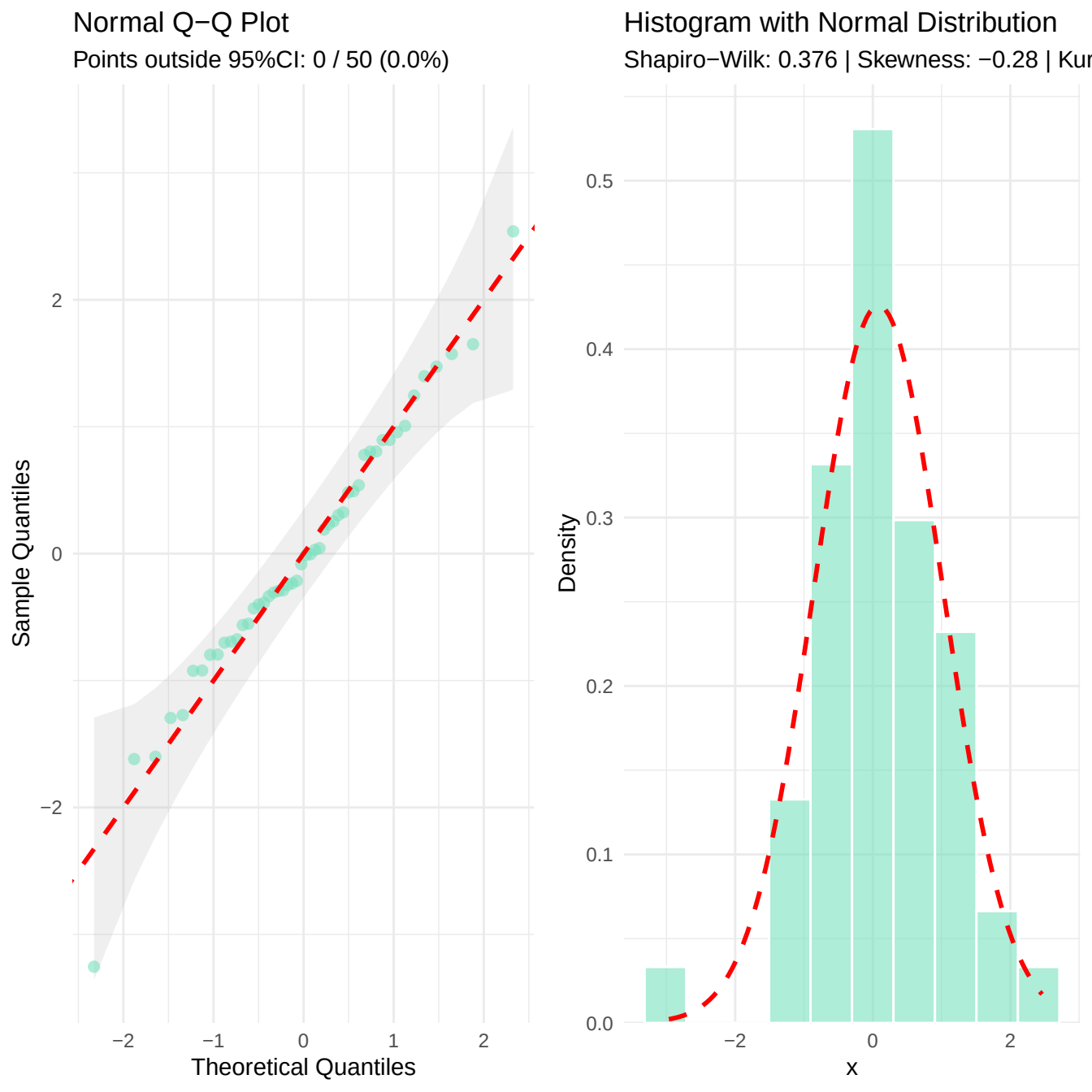

Missing Values by Variable
Complete cases: 0 / 1 (0.0%)
b
1 (100%) missing

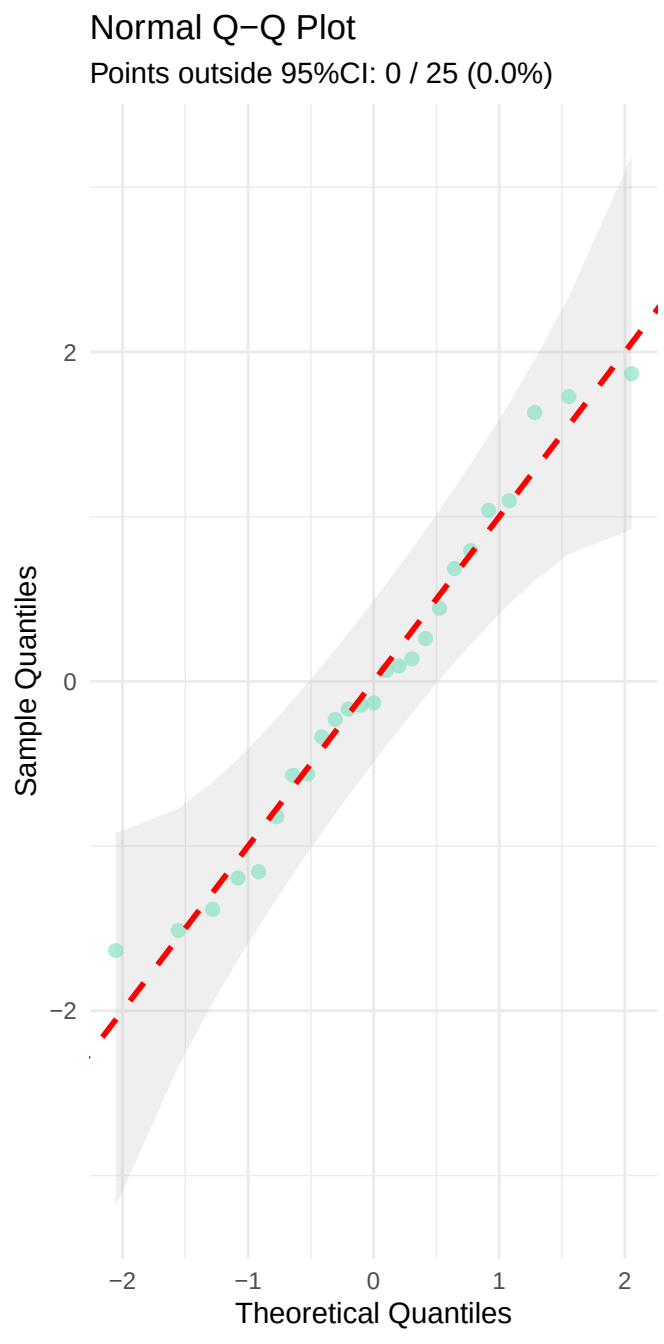

Missing Value Patterns
Missing values: 1 / 2 (50.0%)
b

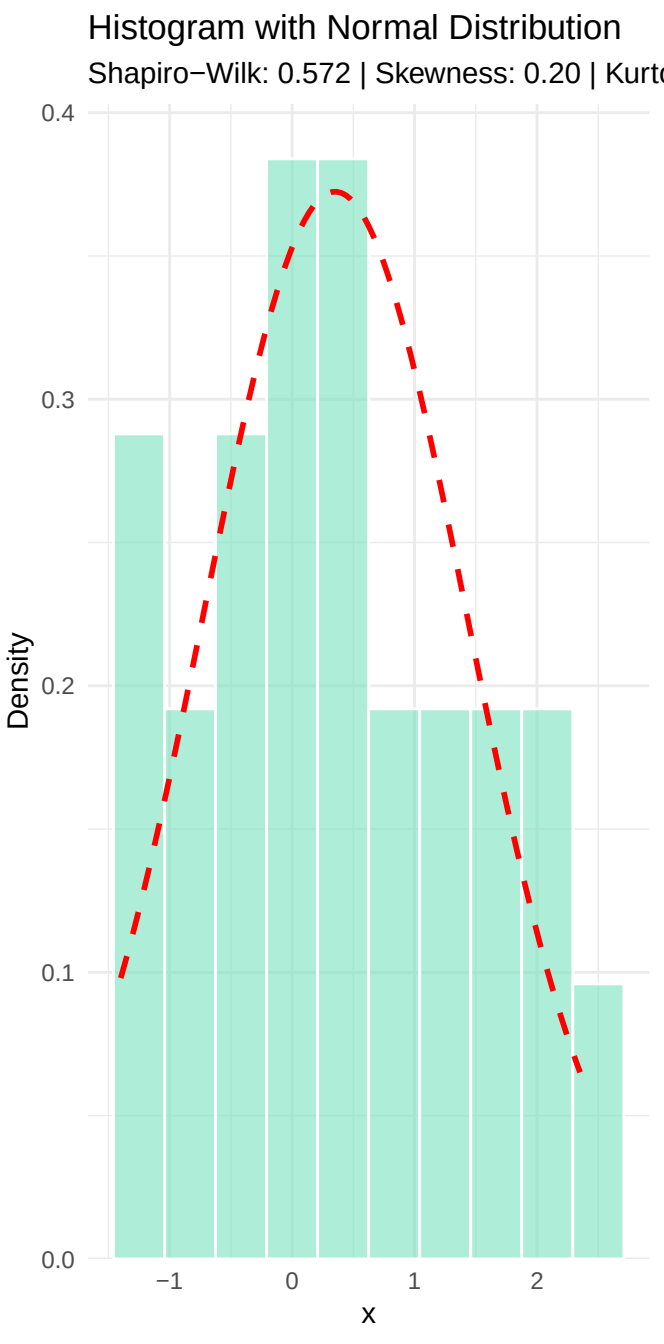

Missing Values by Variable
Complete cases: 0 / 2 (0.0%)
a
2 (100%) missing
b
2 (100%) missing

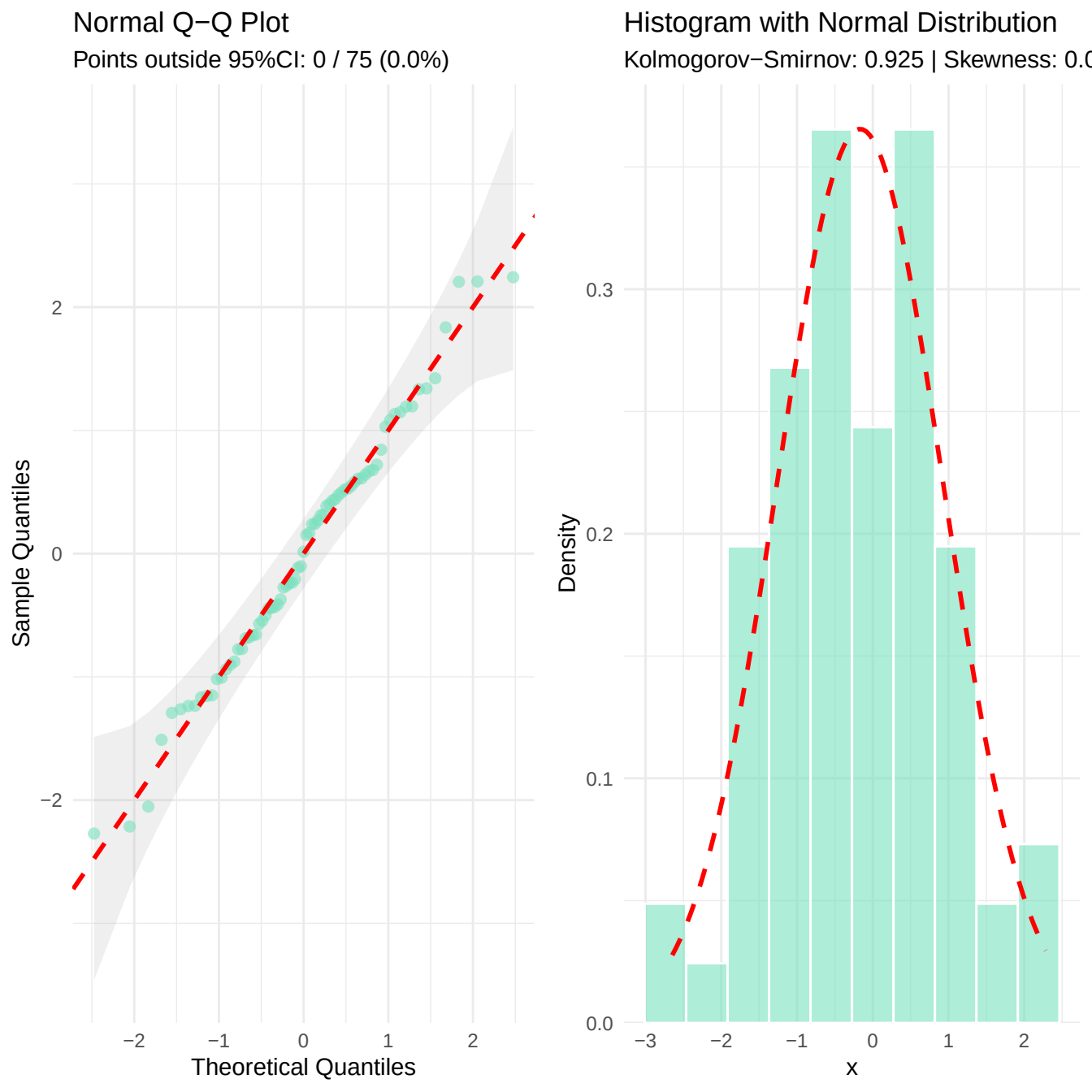

Missing Value Patterns
Missing values: 4 / 4 (100.0%)
a
b

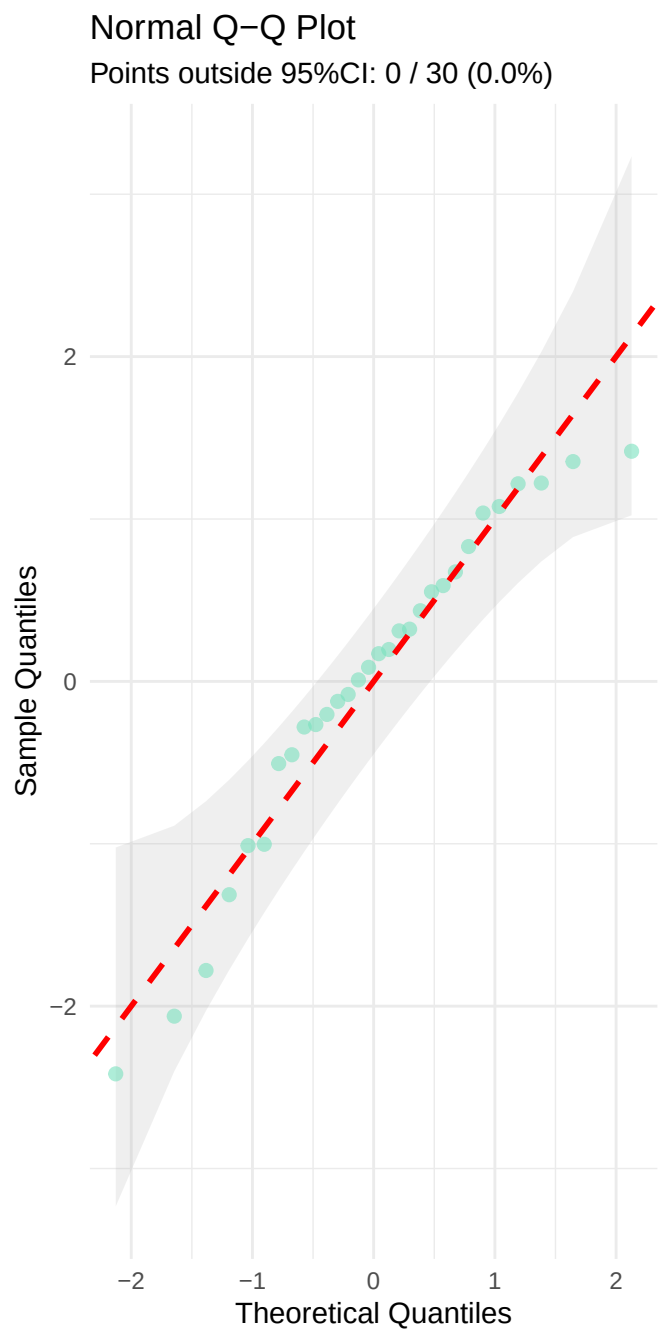

Missing Values by Variable
Complete cases: 0 / 5 (0.0%)
X14 3 (60%) missing
X23 3 (60%) missing
X44 3 (60%) missing
X2 2 (40%) missing
X6 2 (40%) missing
X13 2 (40%) missing
X16 2 (40%) missing
X17 2 (40%) missing
X18 2 (40%) missing
X19 2 (40%) missing
X22 2 (40%) missing
X25 2 (40%) missing
X30 2 (40%) missing
X48 2 (40%) missing
X1 1 (20%) missing
X3 1 (20%) missing
X9 1 (20%) missing
X12 1 (20%) missing
X21 1 (20%) missing
X24 1 (20%) missing
X26 1 (20%) missing
X27 1 (20%) missing
X28 1 (20%) missing
X29 1 (20%) missing
X32 1 (20%) missing
X33 1 (20%) missing
X34 1 (20%) missing
X35 1 (20%) missing
X36 1 (20%) missing
X39 1 (20%) missing
X41 1 (20%) missing
X50 1 (20%) missing
X52 1 (20%) missing
Missing Value Patterns
Missing values: 50 / 275 (18.2%)
X14
X23
X44
X2
X6
X13
X16
X17
X18
X19
X22
X25
X30
X48
X1
X3
X9
X12
X21
X24
X26
X27
X28
X29
X32
X33
X34
X35
X36
X39
X41
X50
X52

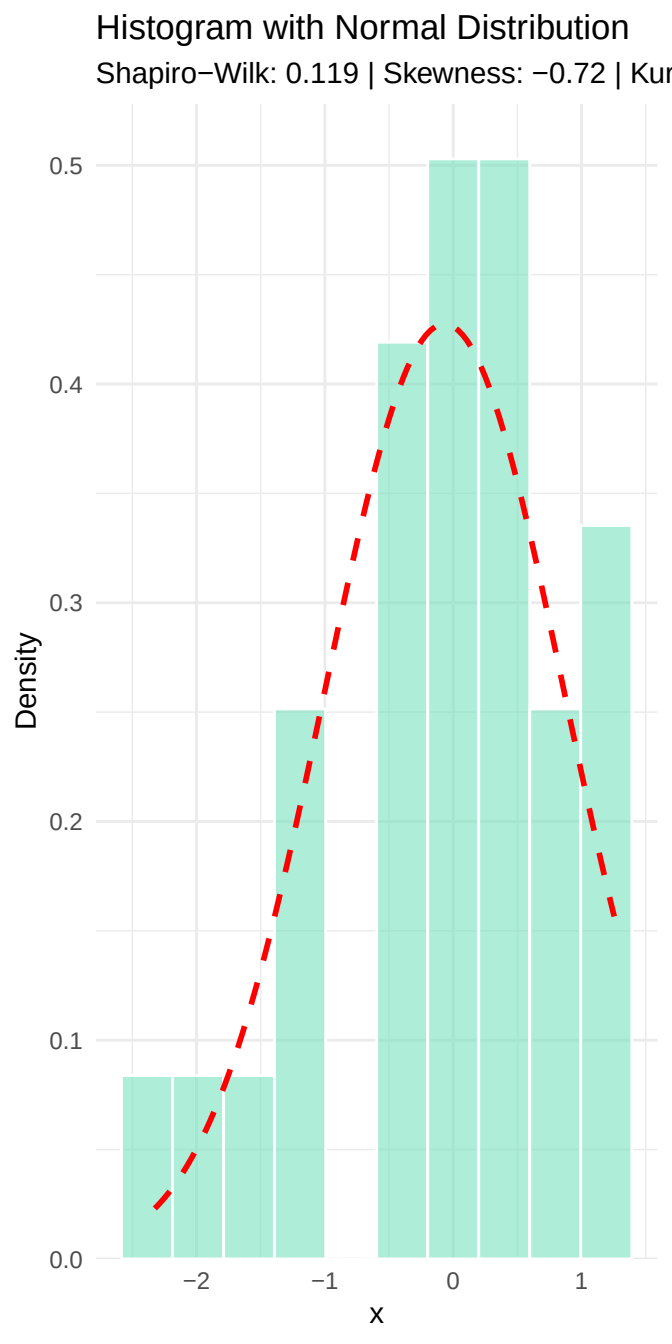

Normal Q−Q Plot
Points outside 95%CI: 0 / 50 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2
Histogram with Normal Distribution
Shapiro−Wilk: 0.376 | Skewness: −0.28 | Kur
Density
x
0.5
0.4
0.3
0.2
0.1
0.0
−2
0
2

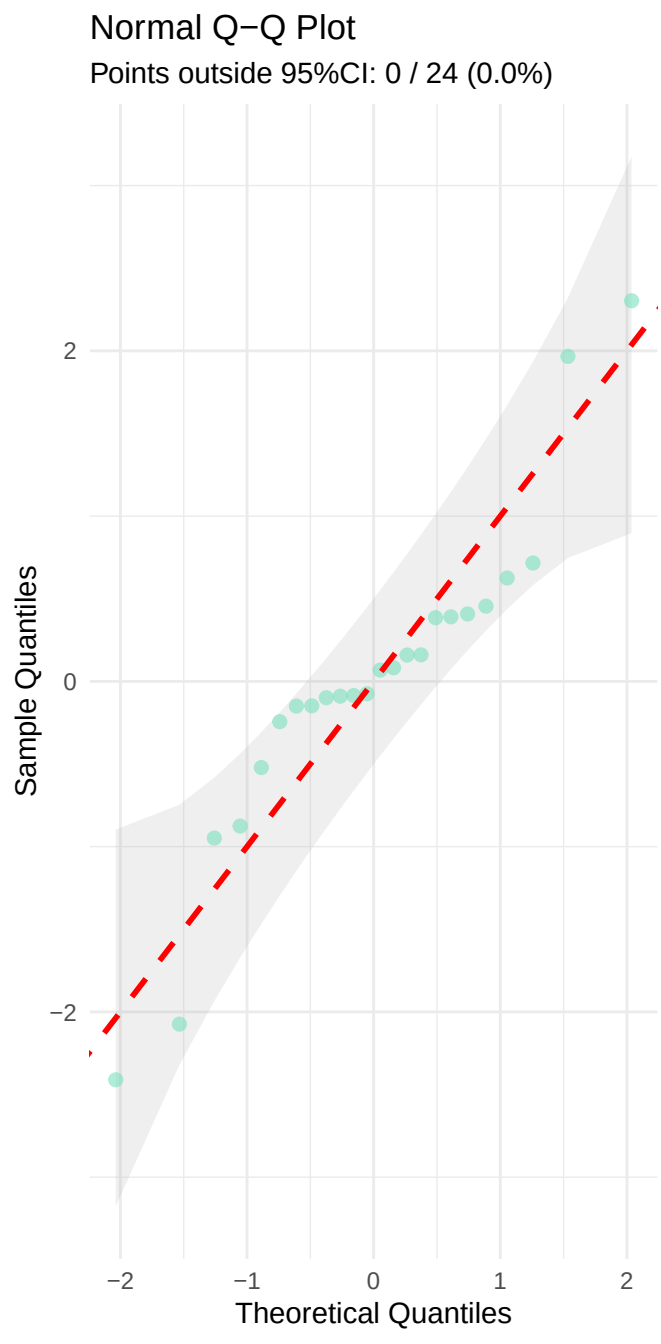

Normal Q−Q Plot
Points outside 95%CI: 0 / 25 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2

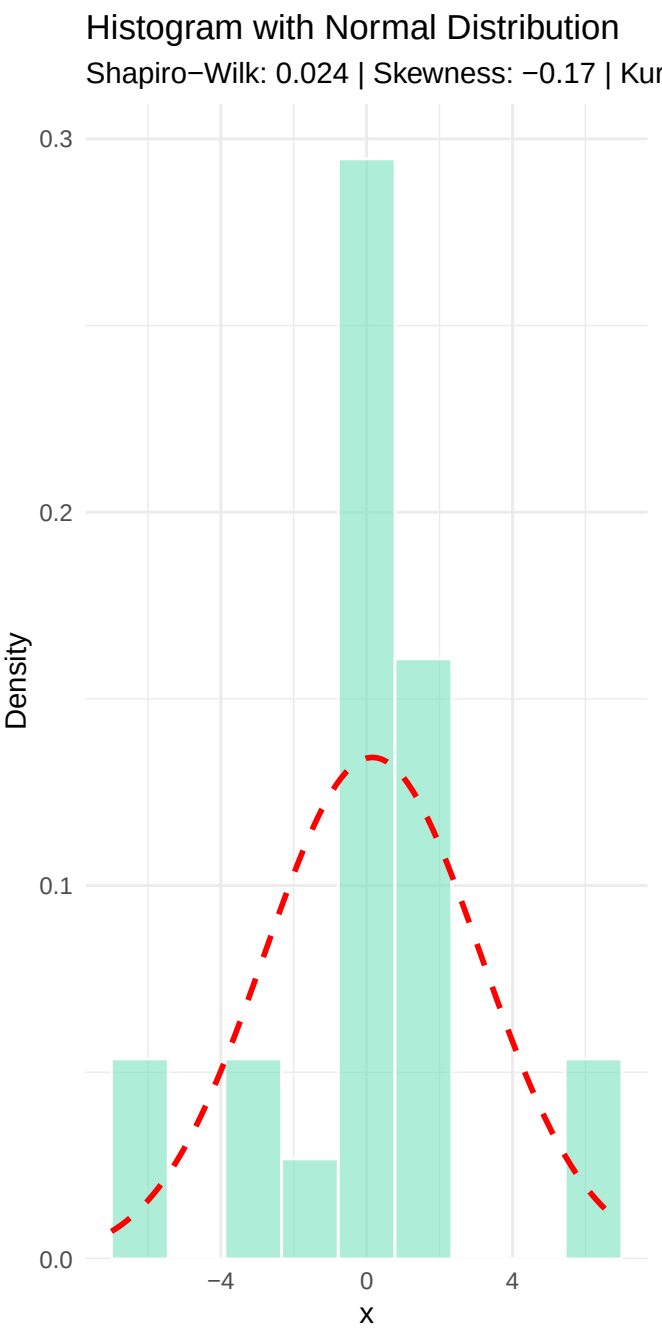

Histogram with Normal Distribution
Shapiro−Wilk: 0.572 | Skewness: 0.20 | Kurto
Density
x
0.4
0.3
0.2
0.1
0.0
−1
0
1
2

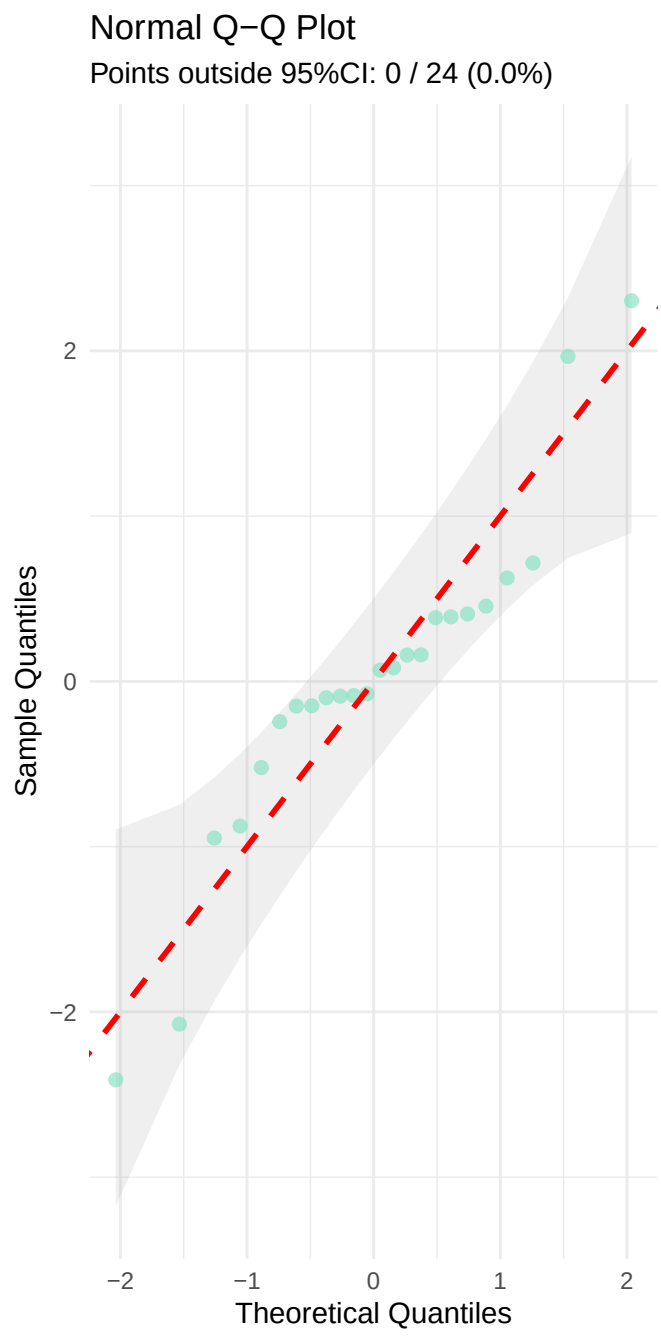

Normal Q−Q Plot
Points outside 95%CI: 0 / 75 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2
Histogram with Normal Distribution
Kolmogorov−Smirnov: 0.925 | Skewness: 0.0
Density
x
0.3
0.2
0.1
0.0
−3
−2
−1
0
1
2

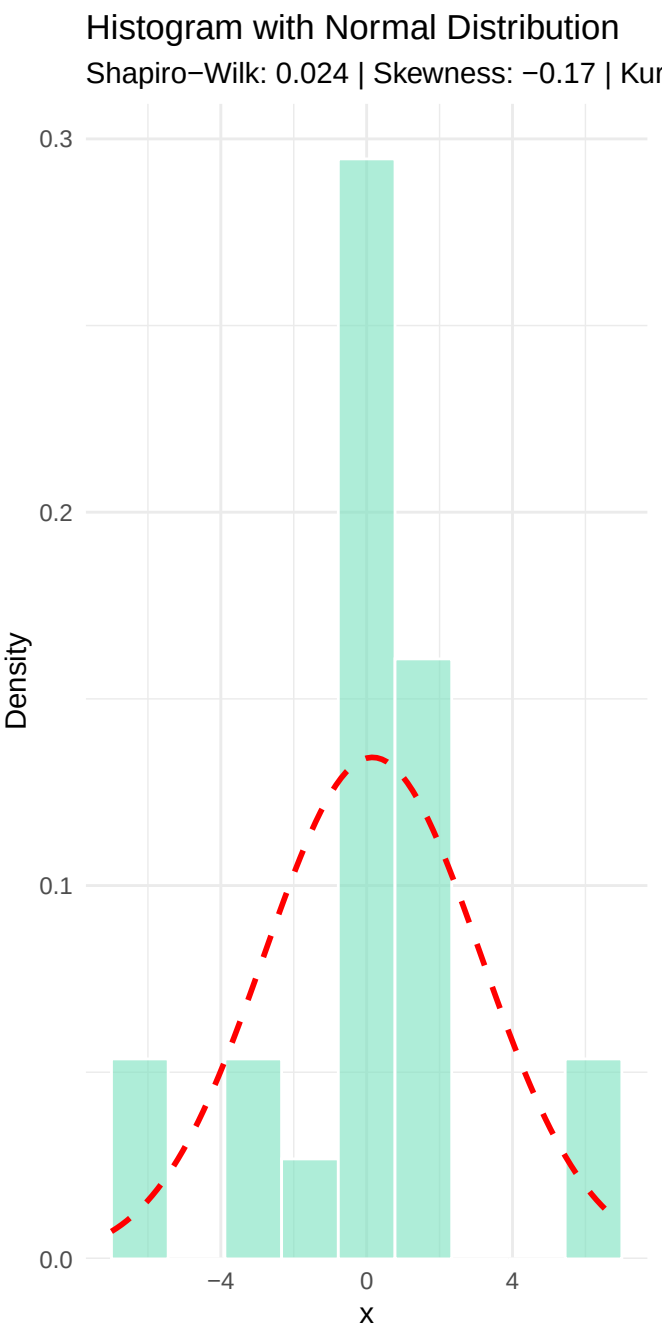

Normal Q−Q Plot
Points outside 95%CI: 0 / 30 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2

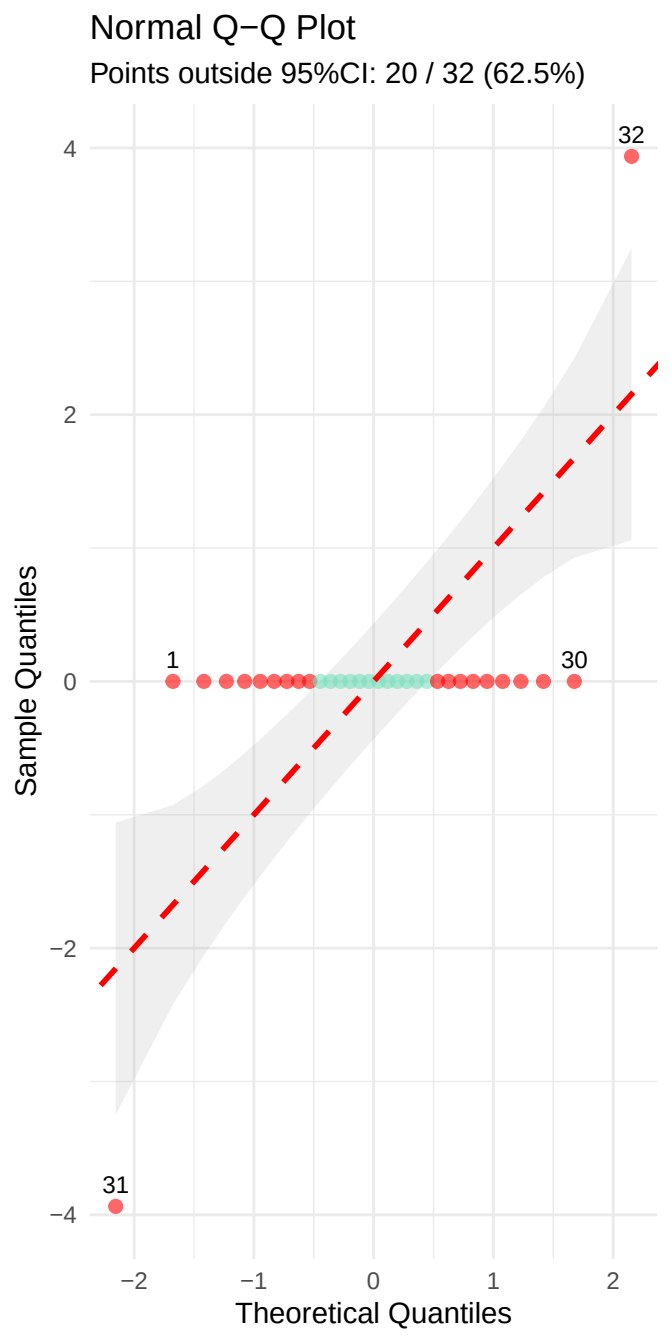

Histogram with Normal Distribution
Shapiro−Wilk: 0.119 | Skewness: −0.72 | Kur
Density
x
0.5
0.4
0.3
0.2
0.1
0.0
−2
−1
0
1

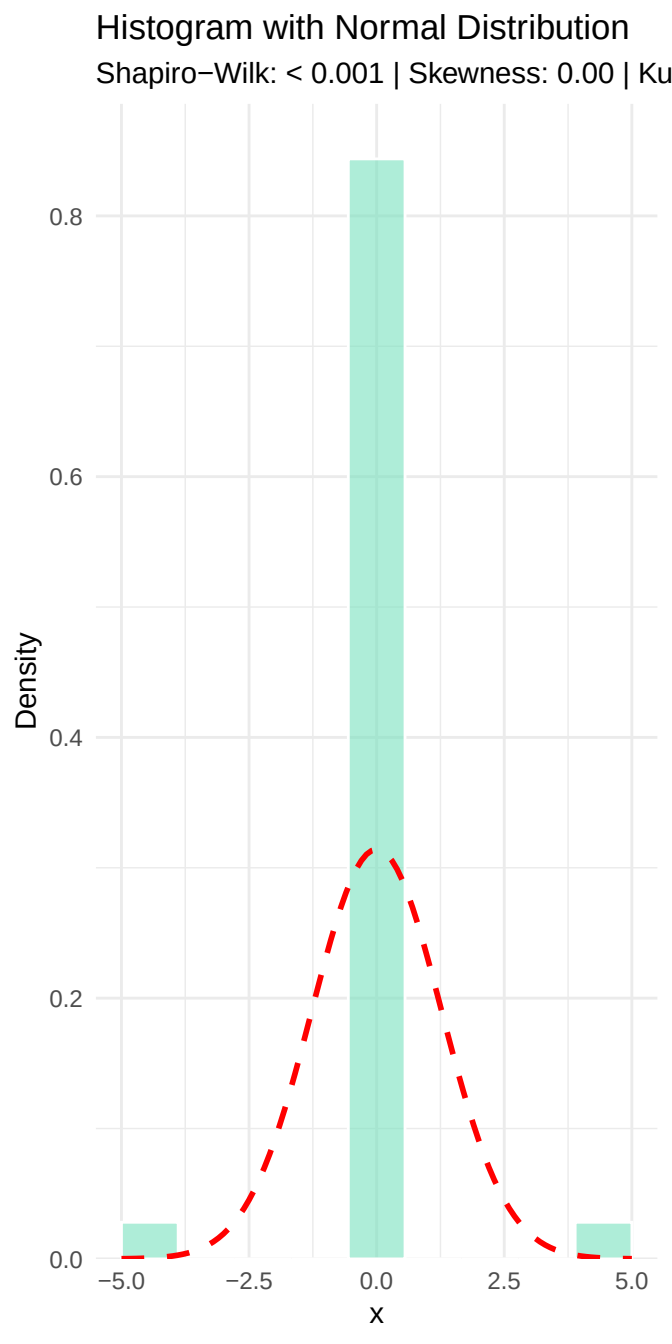

Normal Q−Q Plot
Points outside 95%CI: 0 / 24 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2

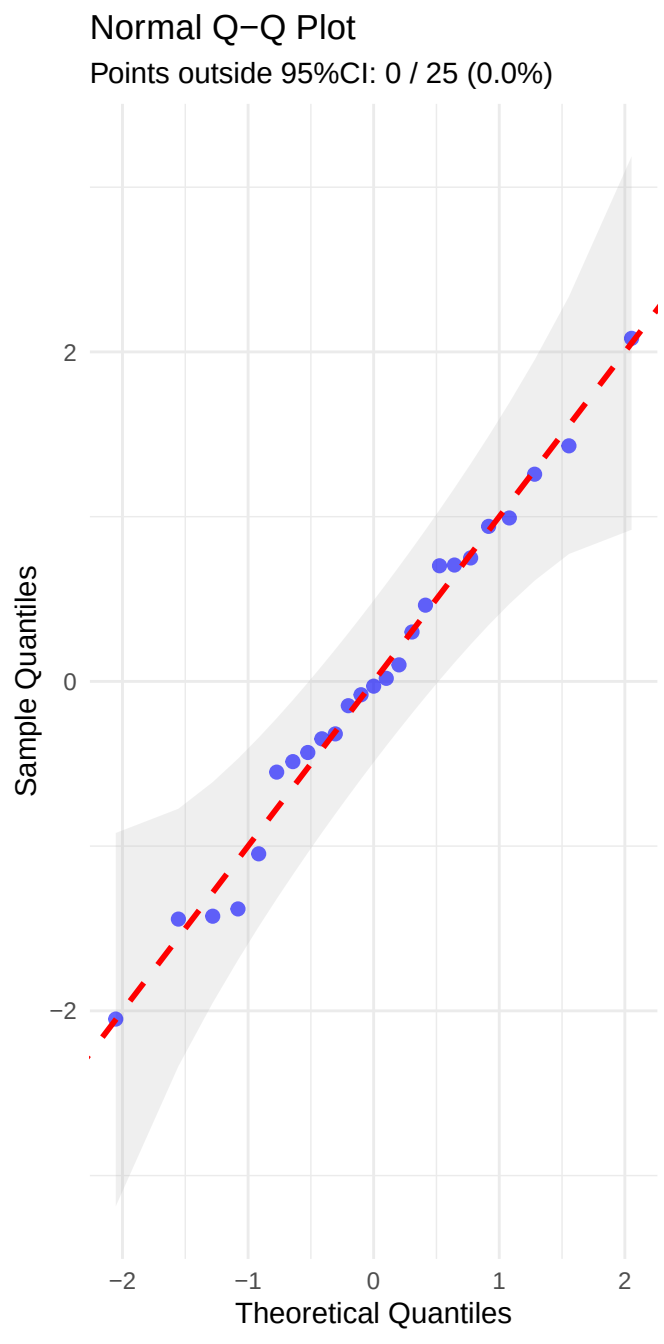

Histogram with Normal Distribution
Shapiro−Wilk: 0.024 | Skewness: −0.17 | Kur
Density
x
0.3
0.2
0.1
0.0
−4
0
4

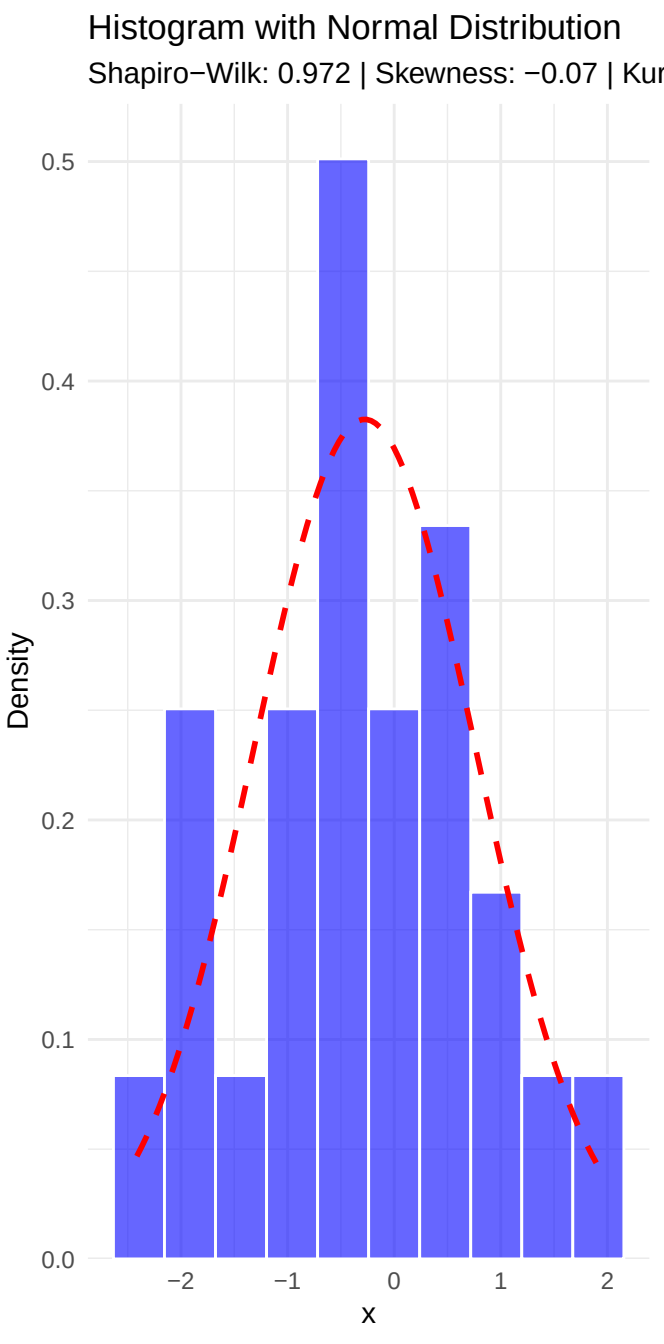

Normal Q−Q Plot
Points outside 95%CI: 0 / 24 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2

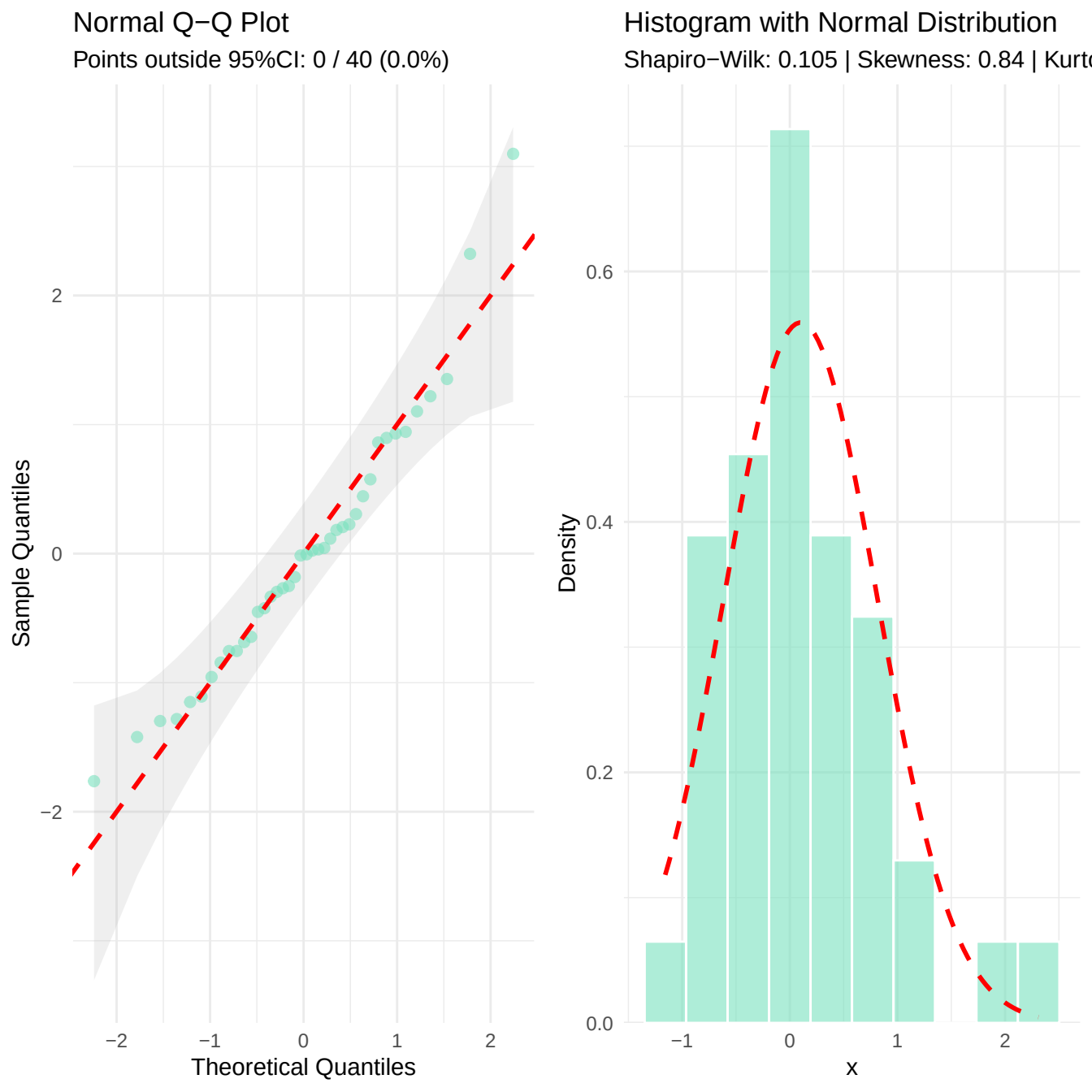

Histogram with Normal Distribution
Shapiro−Wilk: 0.024 | Skewness: −0.17 | Kur
Density
x
0.3
0.2
0.1
0.0
−4
0
4

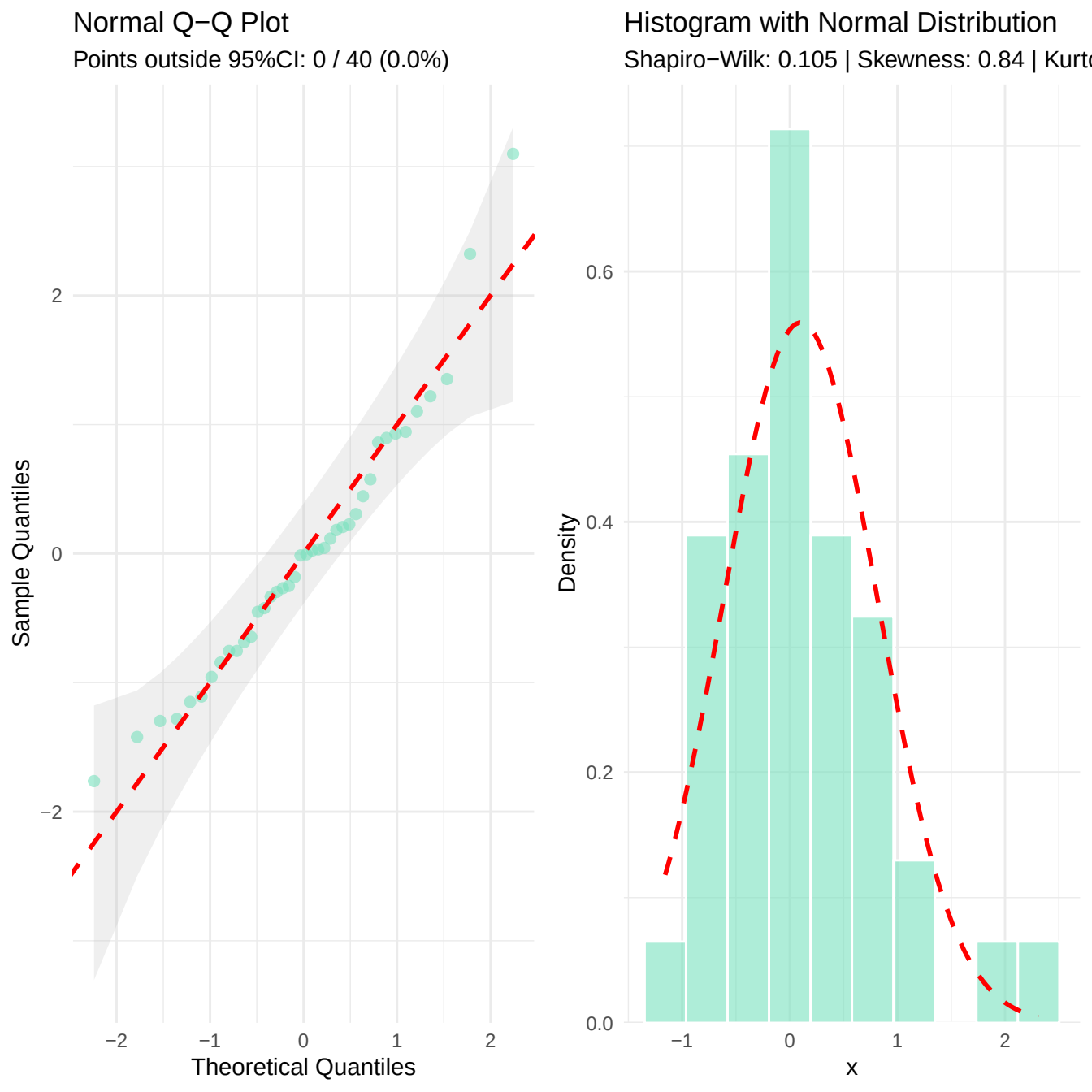

Normal Q−Q Plot
Points outside 95%CI: 20 / 32 (62.5%)
Sample Quantiles
Theoretical Quantiles
32
1
30
31
4
2
0
−2
−4
−2
−1
0
1
2

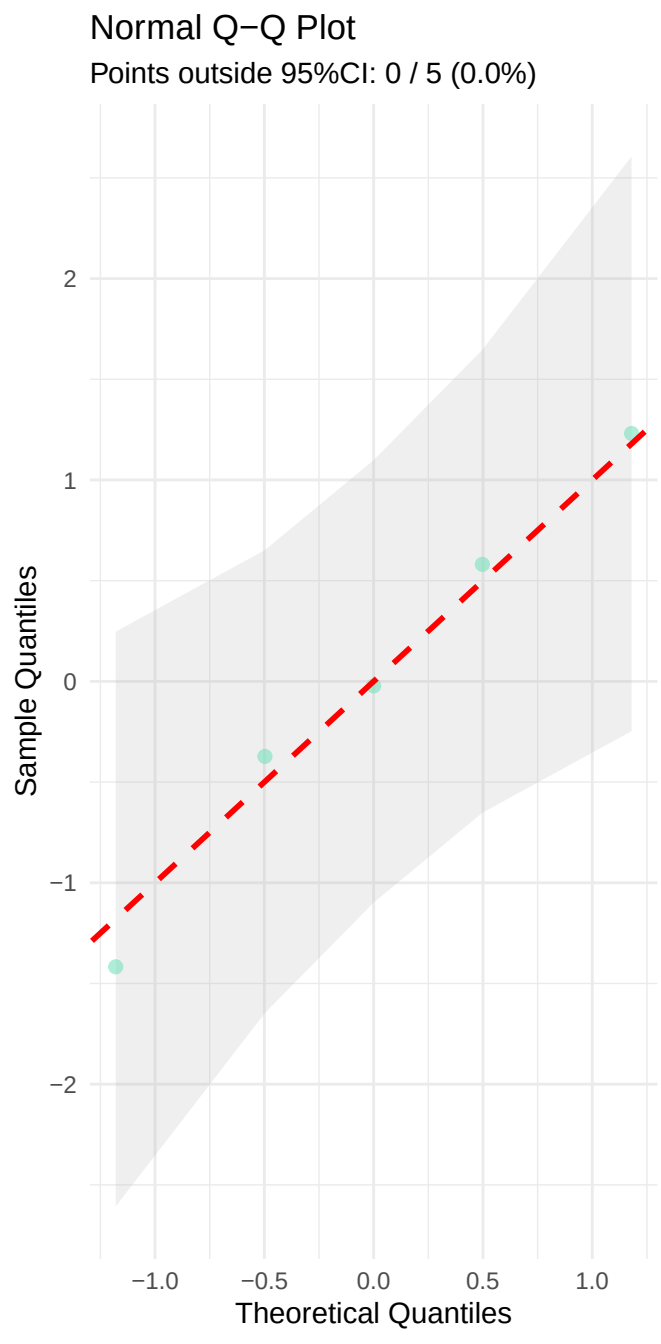

Histogram with Normal Distribution
Shapiro−Wilk: < 0.001 | Skewness: 0.00 | Ku
Density
x
0.8
0.6
0.4
0.2
0.0
−5.0
−2.5
0.0
2.5
5.0

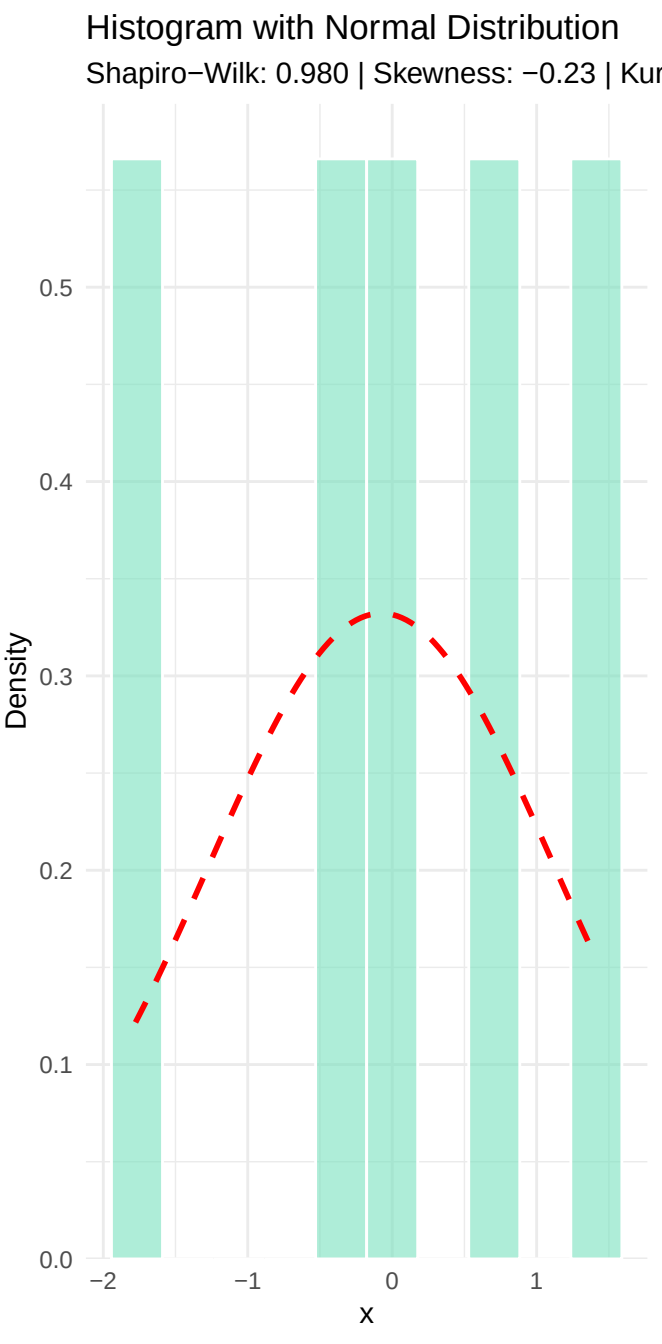

Normal Q−Q Plot
Points outside 95%CI: 0 / 25 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2

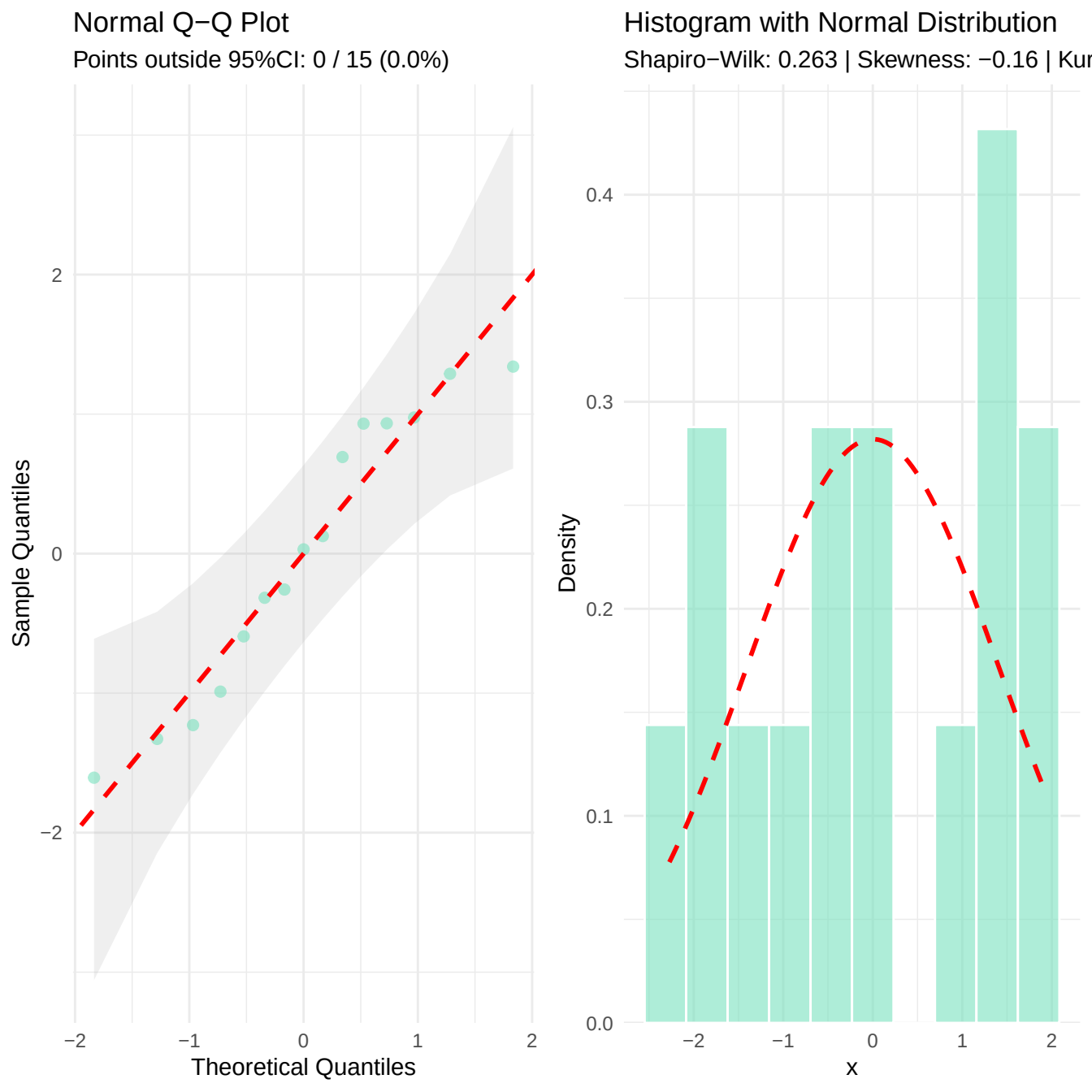

Histogram with Normal Distribution
Shapiro−Wilk: 0.972 | Skewness: −0.07 | Kur
Density
x
0.5
0.4
0.3
0.2
0.1
0.0
−2
−1
0
1
2

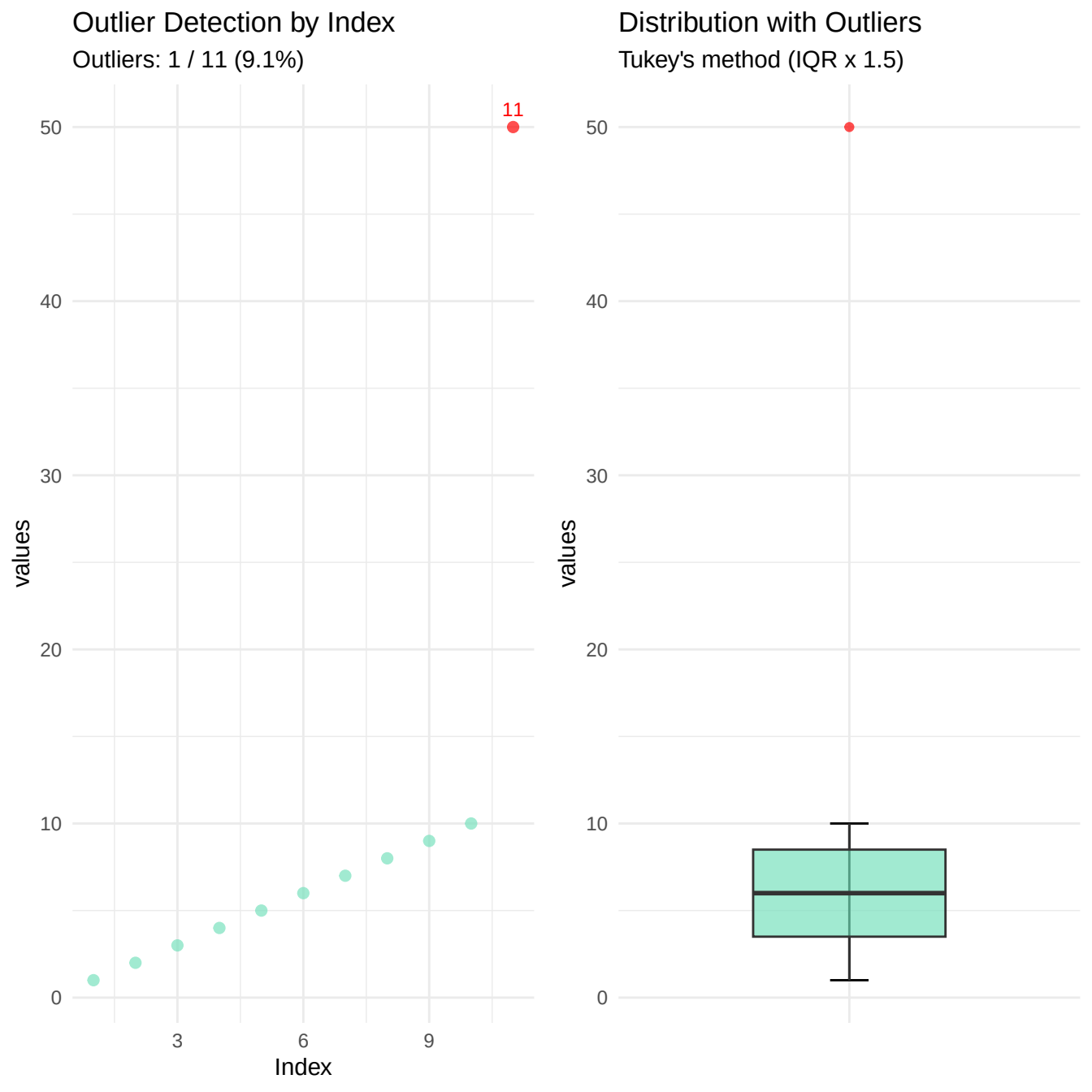

Normal Q−Q Plot
Points outside 95%CI: 0 / 40 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2
Histogram with Normal Distribution
Shapiro−Wilk: 0.105 | Skewness: 0.84 | Kurt
Density
x
0.6
0.4
0.2
0.0
−1
0
1
2

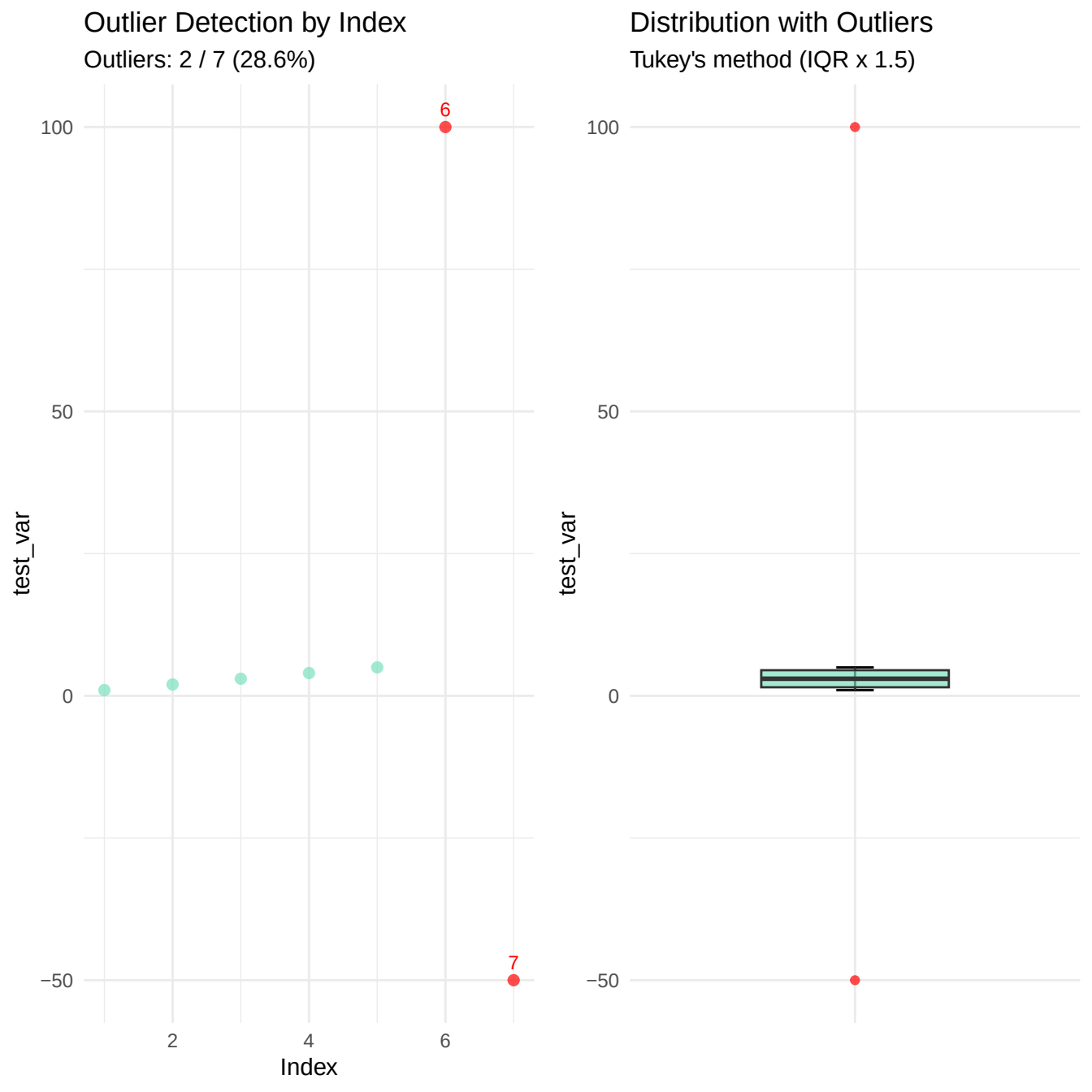

Normal Q−Q Plot
Points outside 95%CI: 0 / 40 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2
Histogram with Normal Distribution
Shapiro−Wilk: 0.105 | Skewness: 0.84 | Kurt
Density
x
0.6
0.4
0.2
0.0
−1
0
1
2

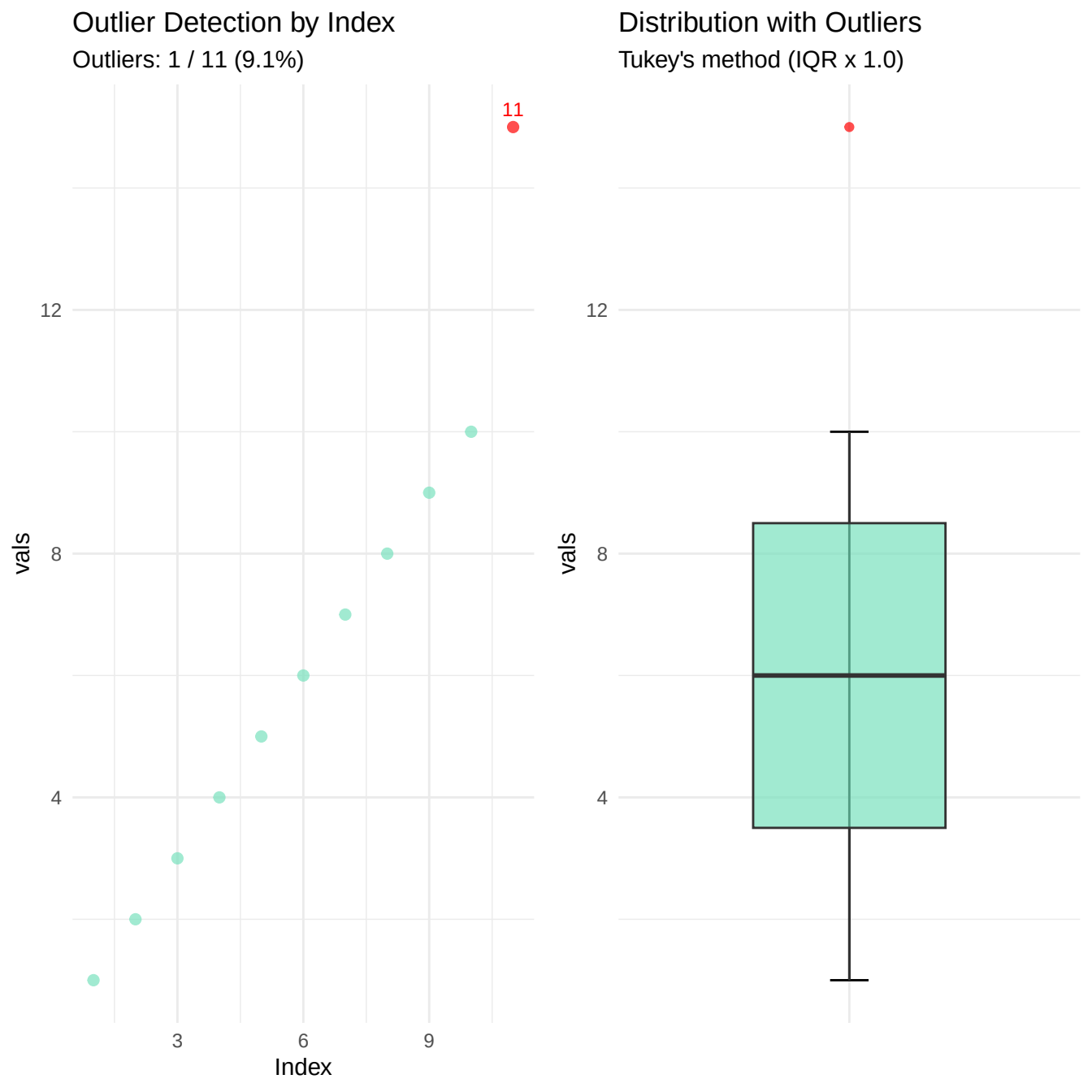

Normal Q−Q Plot
Points outside 95%CI: 0 / 5 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
1
0
−1
−2
−1.0
−0.5
0.0
0.5
1.0

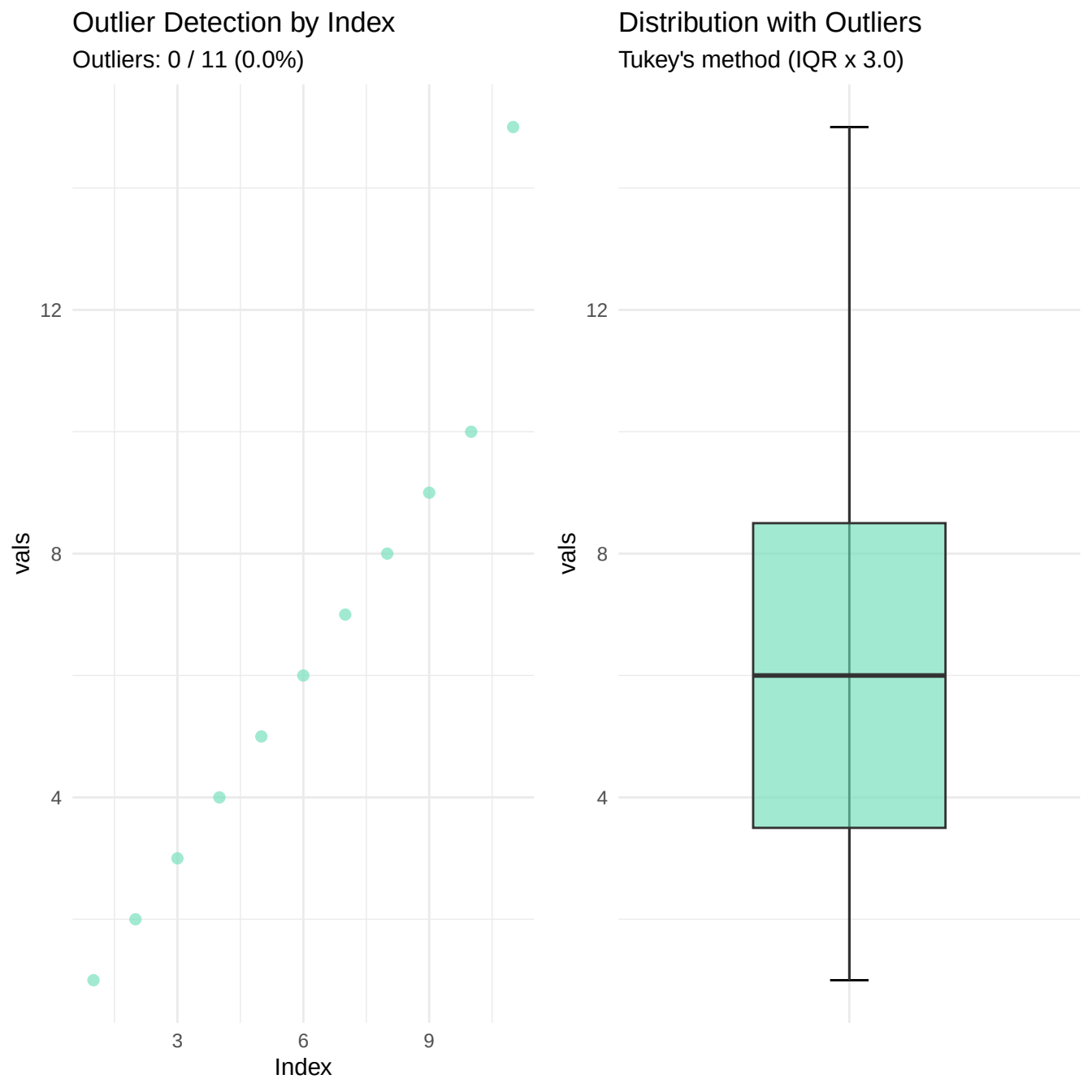

Histogram with Normal Distribution
Shapiro−Wilk: 0.980 | Skewness: −0.23 | Kur
Density
x
0.5
0.4
0.3
0.2
0.1
0.0
−2
−1
0
1

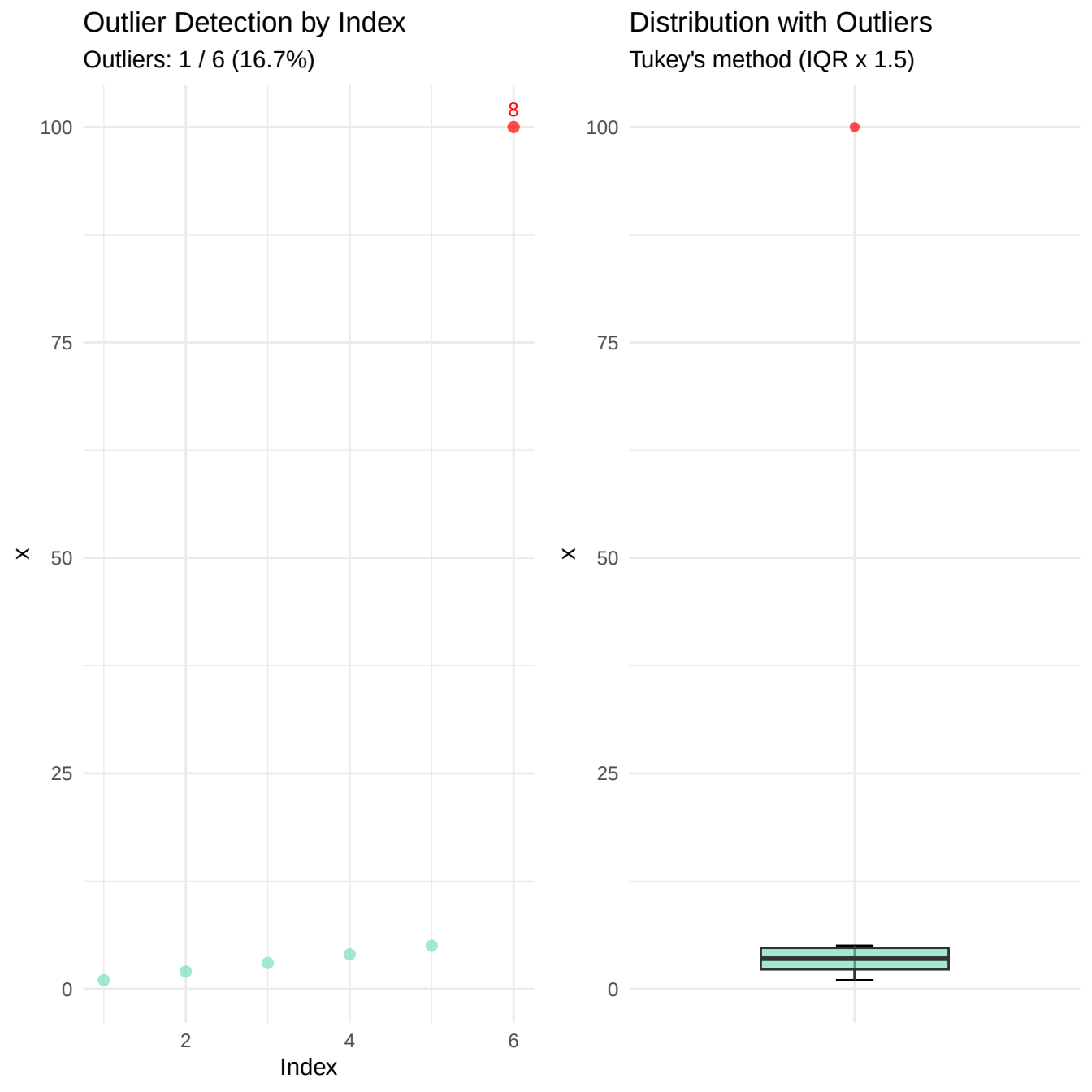

Normal Q−Q Plot
Points outside 95%CI: 0 / 15 (0.0%)
Sample Quantiles
Theoretical Quantiles
2
0
−2
−2
−1
0
1
2
Histogram with Normal Distribution
Shapiro−Wilk: 0.263 | Skewness: −0.16 | Kur
Density
x
0.4
0.3
0.2
0.1
0.0
−2
−1
0
1
2

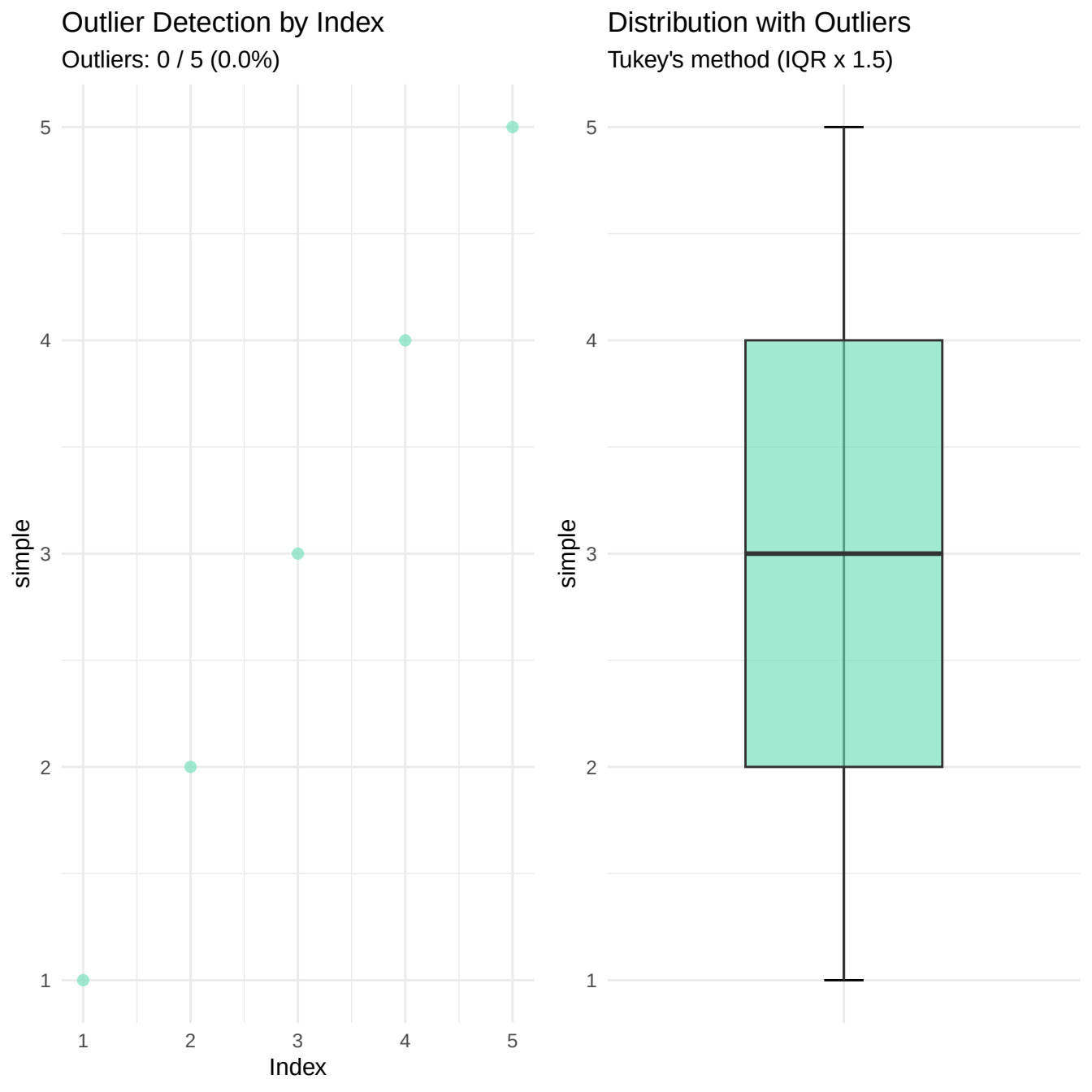

Outlier Detection by Index
Outliers: 1 / 11 (9.1%)
11
50
40
30
20
10
0
values
3
6
9
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
50
40
30
20
10
0
values

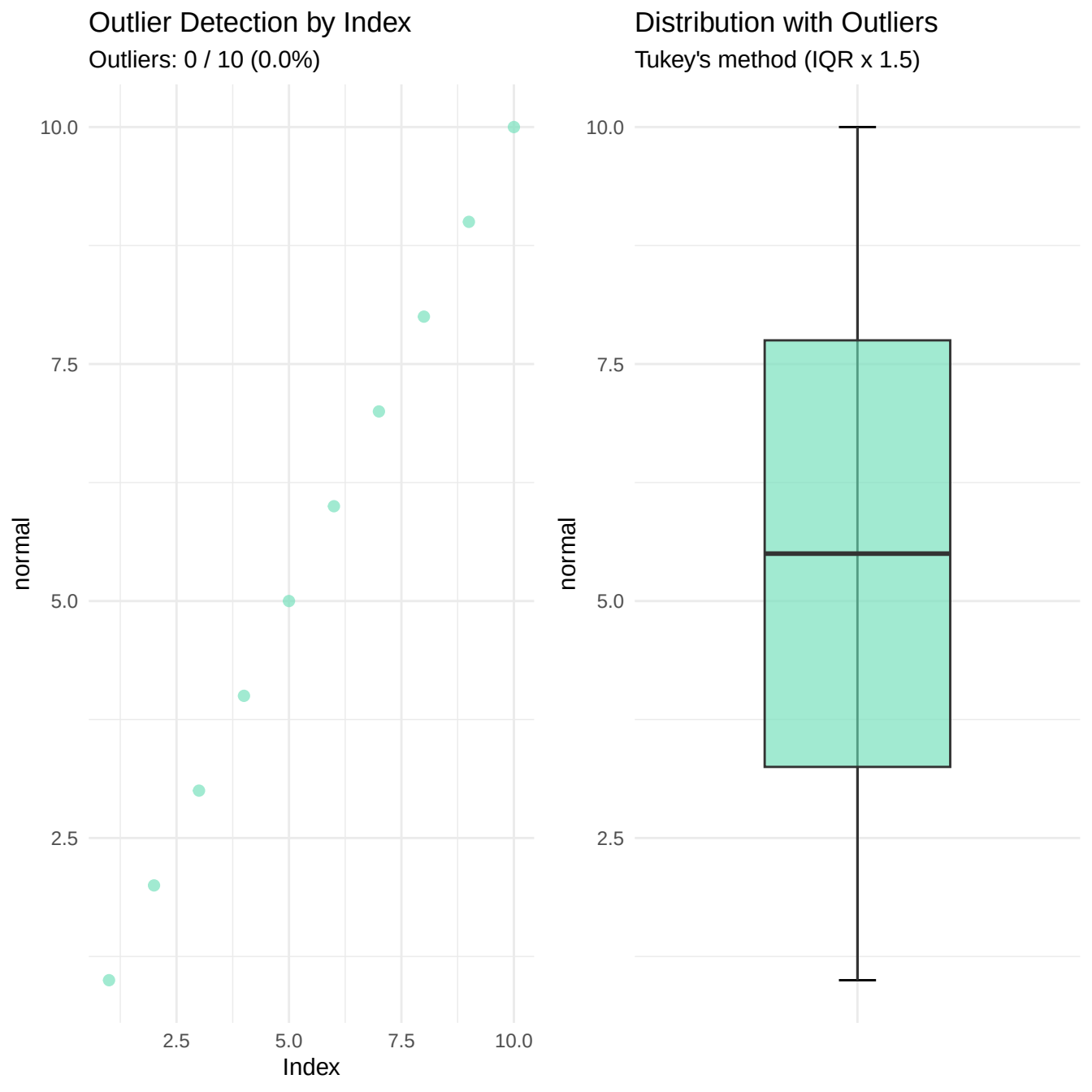

Outlier Detection by Index
Outliers: 2 / 7 (28.6%)
Distribution with Outliers
Tukey's method (IQR x 1.5)
test_var
Index
6
7
100
50
0
−50
2
4
6

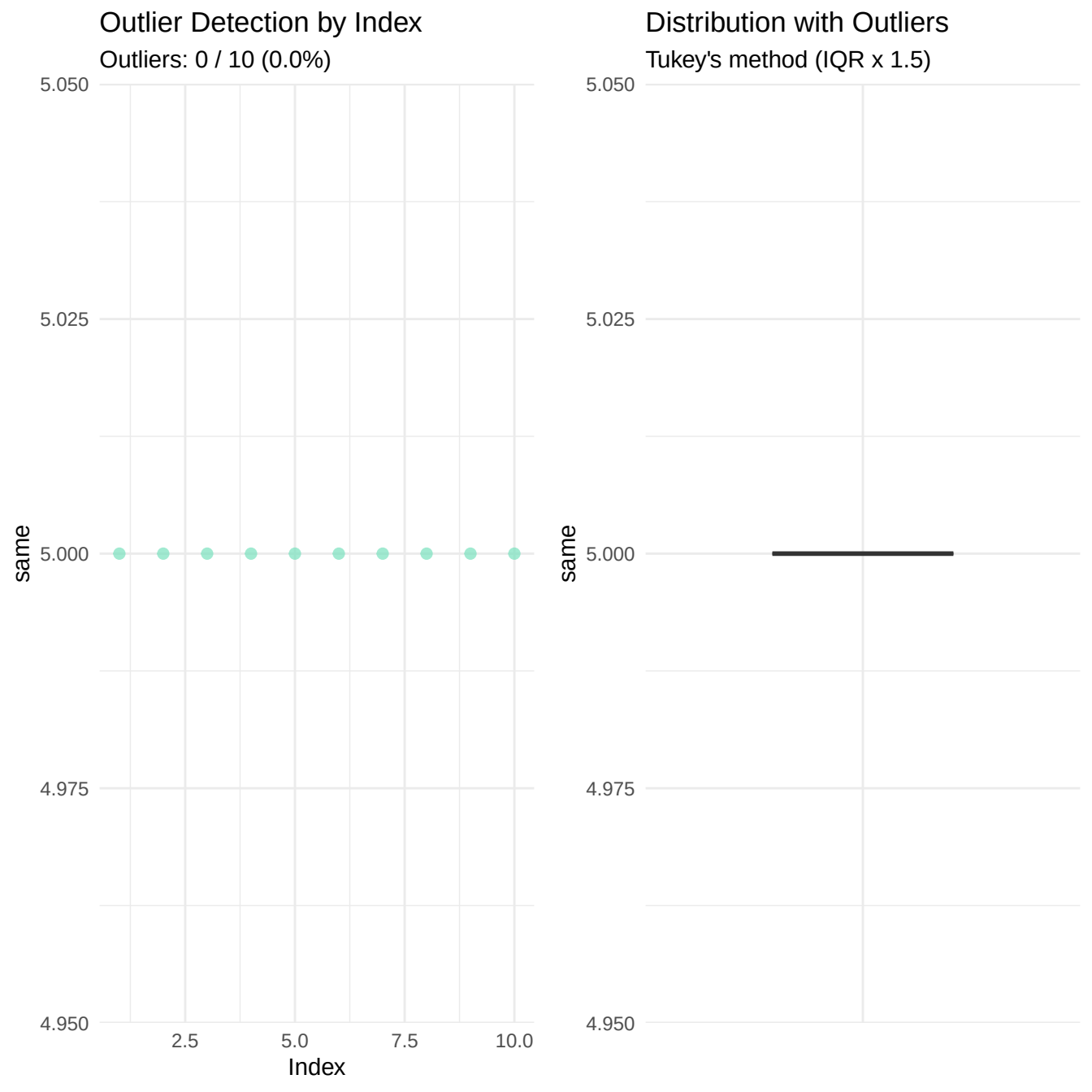

Outlier Detection by Index
Outliers: 1 / 11 (9.1%)
11
12
8
4
vals
3
6
9
Index
Distribution with Outliers
Tukey's method (IQR x 1.0)
12
8
4
vals

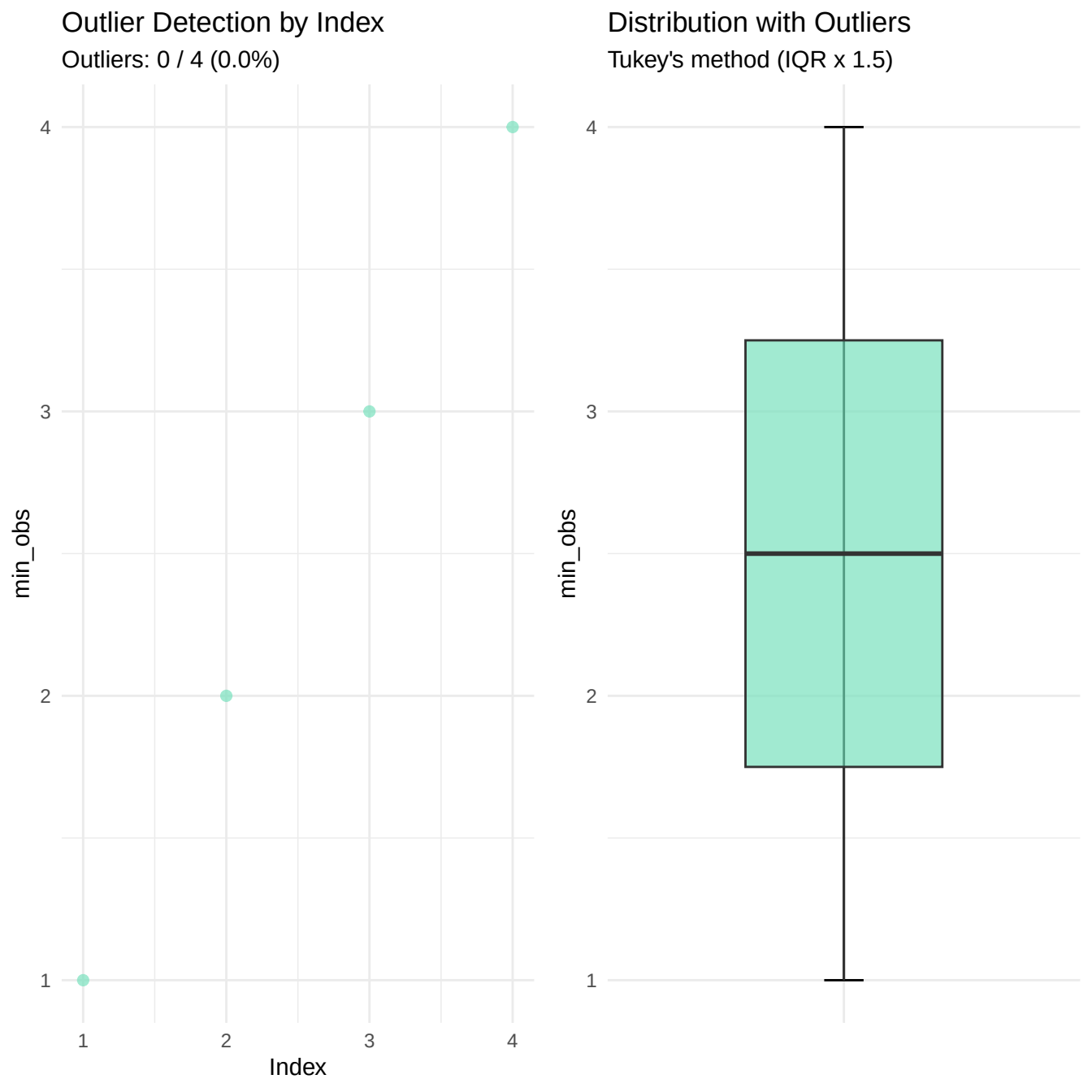

Outlier Detection by Index
Outliers: 0 / 11 (0.0%)
12
8
4
vals
3
6
9
Index
Distribution with Outliers
Tukey's method (IQR x 3.0)
12
8
4
vals

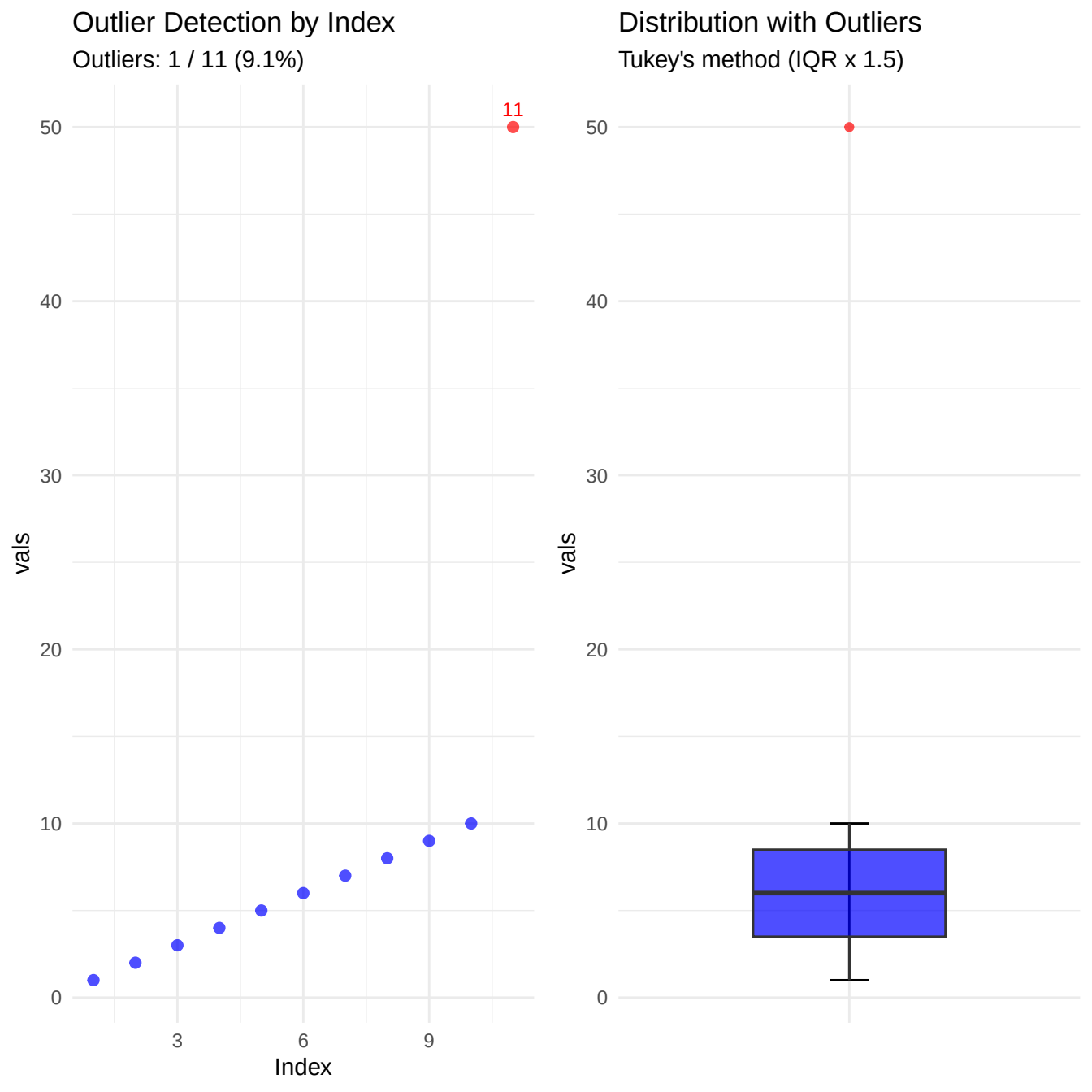

Outlier Detection by Index
Outliers: 1 / 6 (16.7%)
8
100
75
50
25
0
x
2
4
6
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
100
75
50
25
0
x

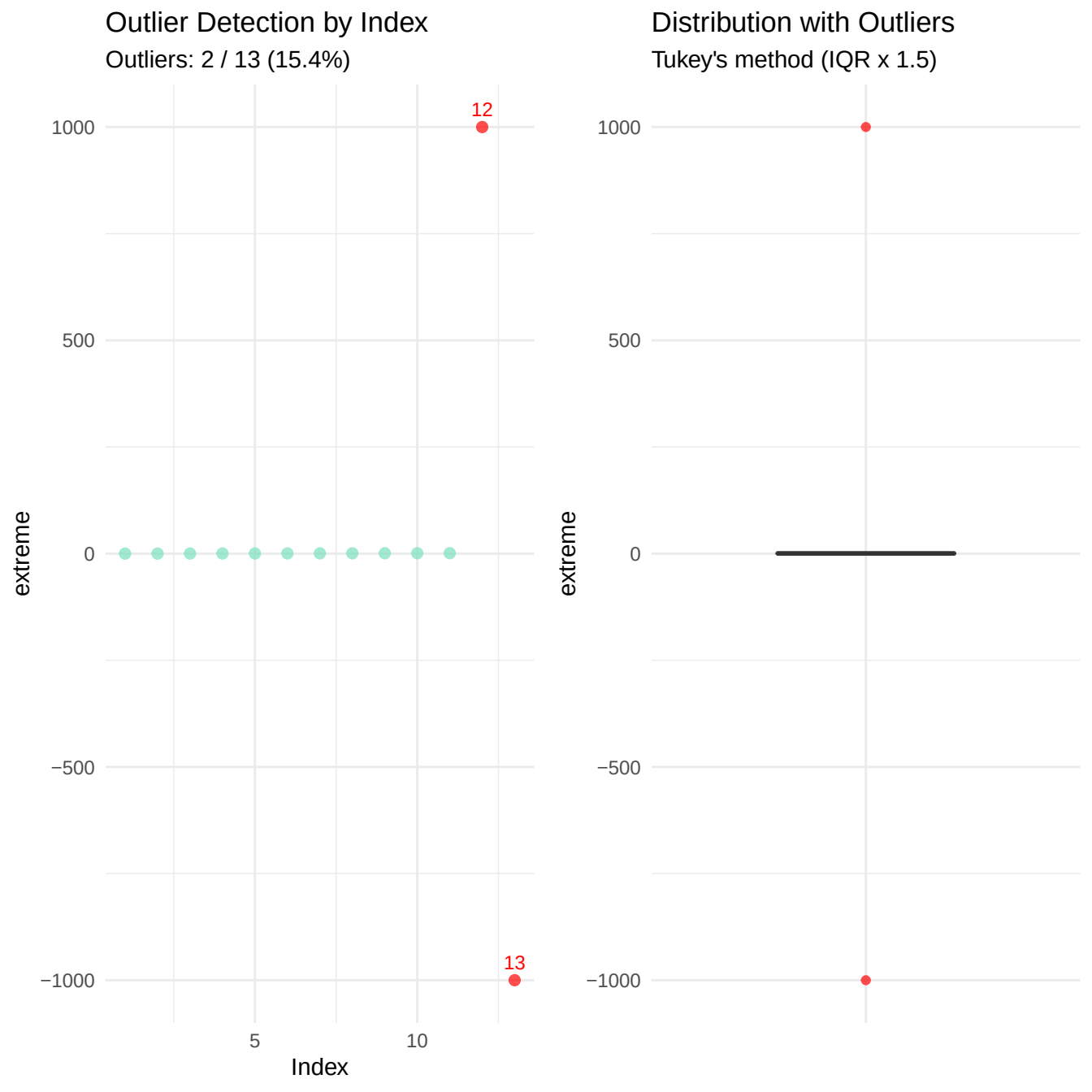

Outlier Detection by Index
Outliers: 0 / 5 (0.0%)
simple
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
simple

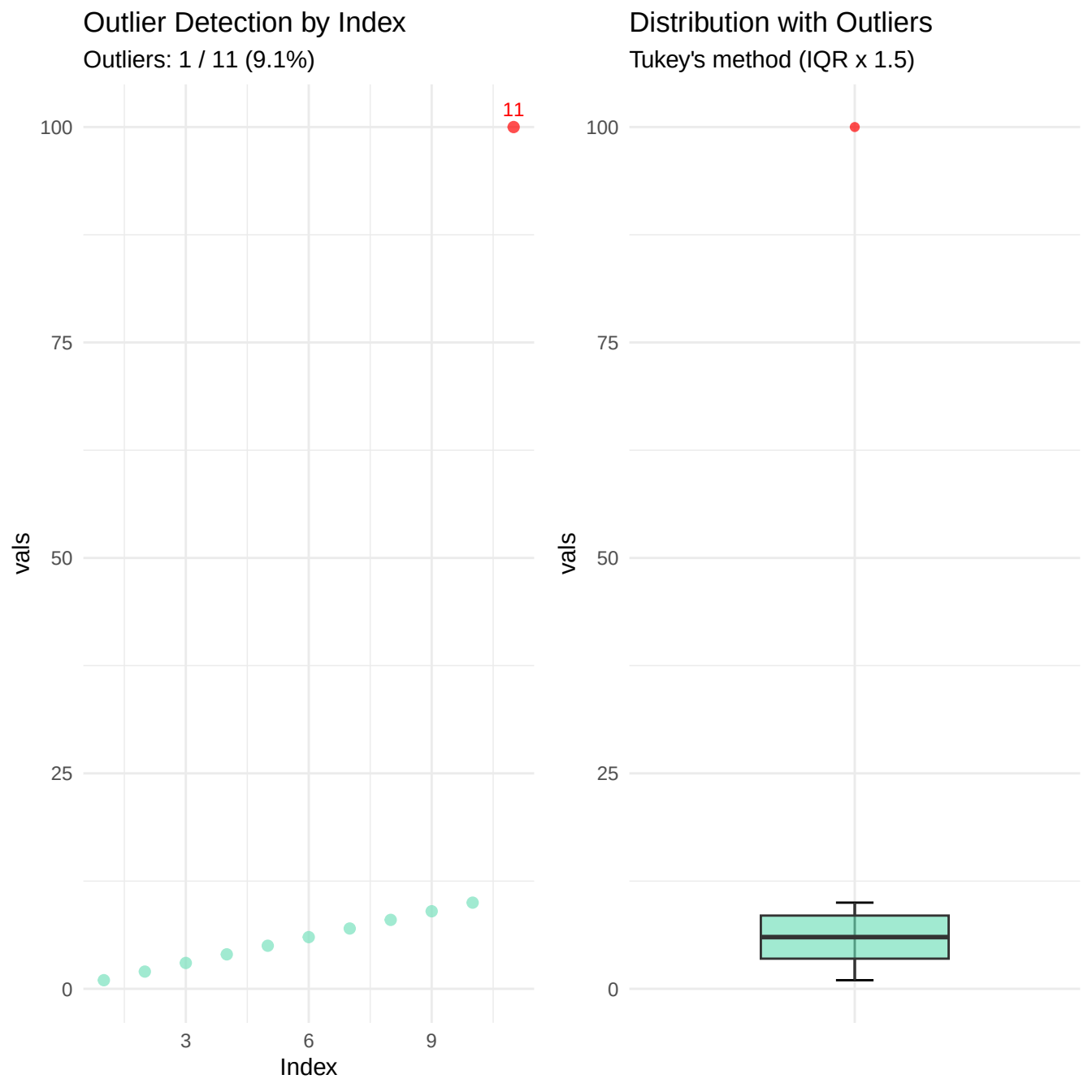

Outlier Detection by Index
Outliers: 0 / 10 (0.0%)
10.0
7.5
5.0
2.5
normal
2.5
5.0
7.5
10.0
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
10.0
7.5
5.0
2.5
normal

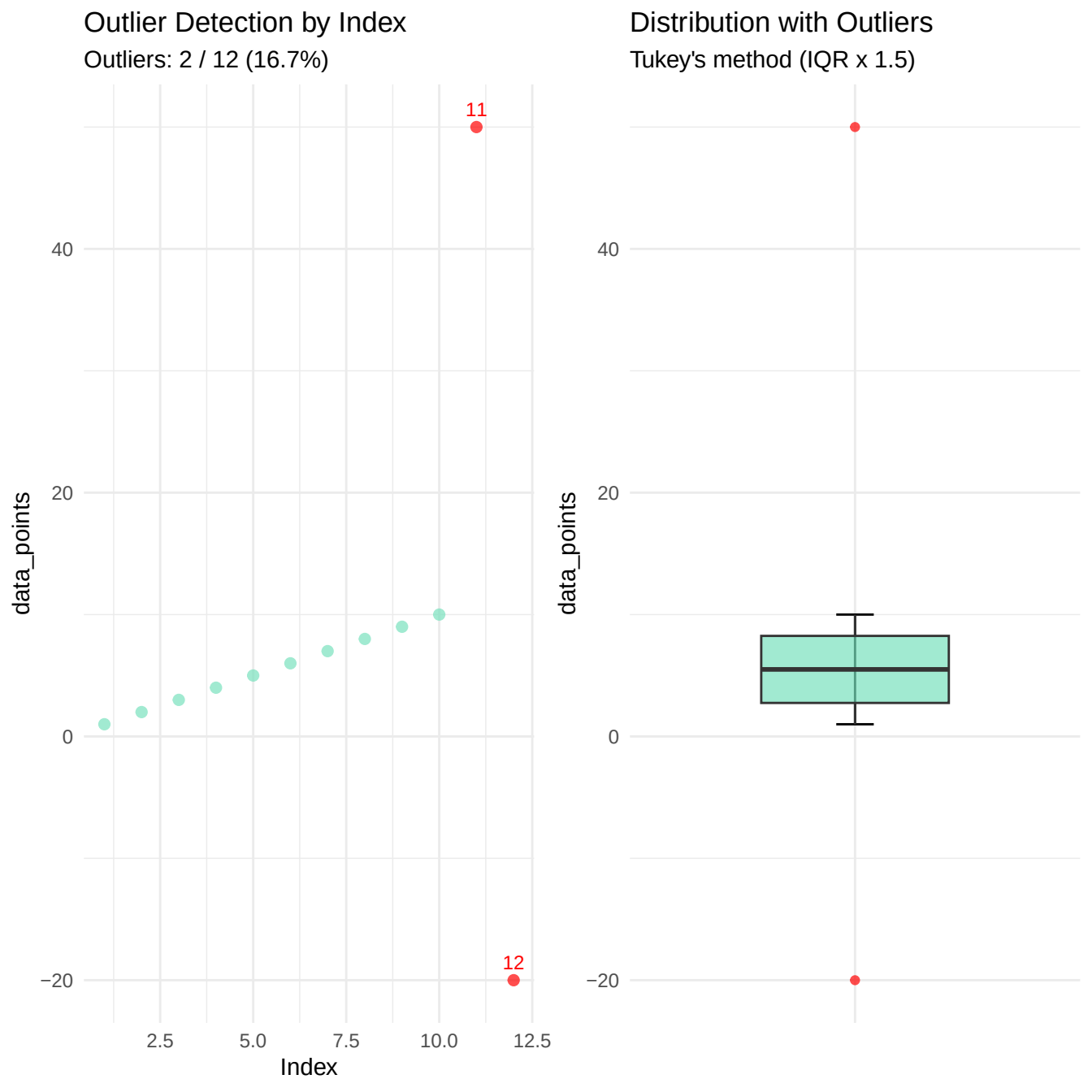

Outlier Detection by Index
Outliers: 0 / 10 (0.0%)
5.050
5.025
5.000
4.975
4.950
same
2.5
5.0
7.5
10.0
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
5.050
5.025
5.000
4.975
4.950
same

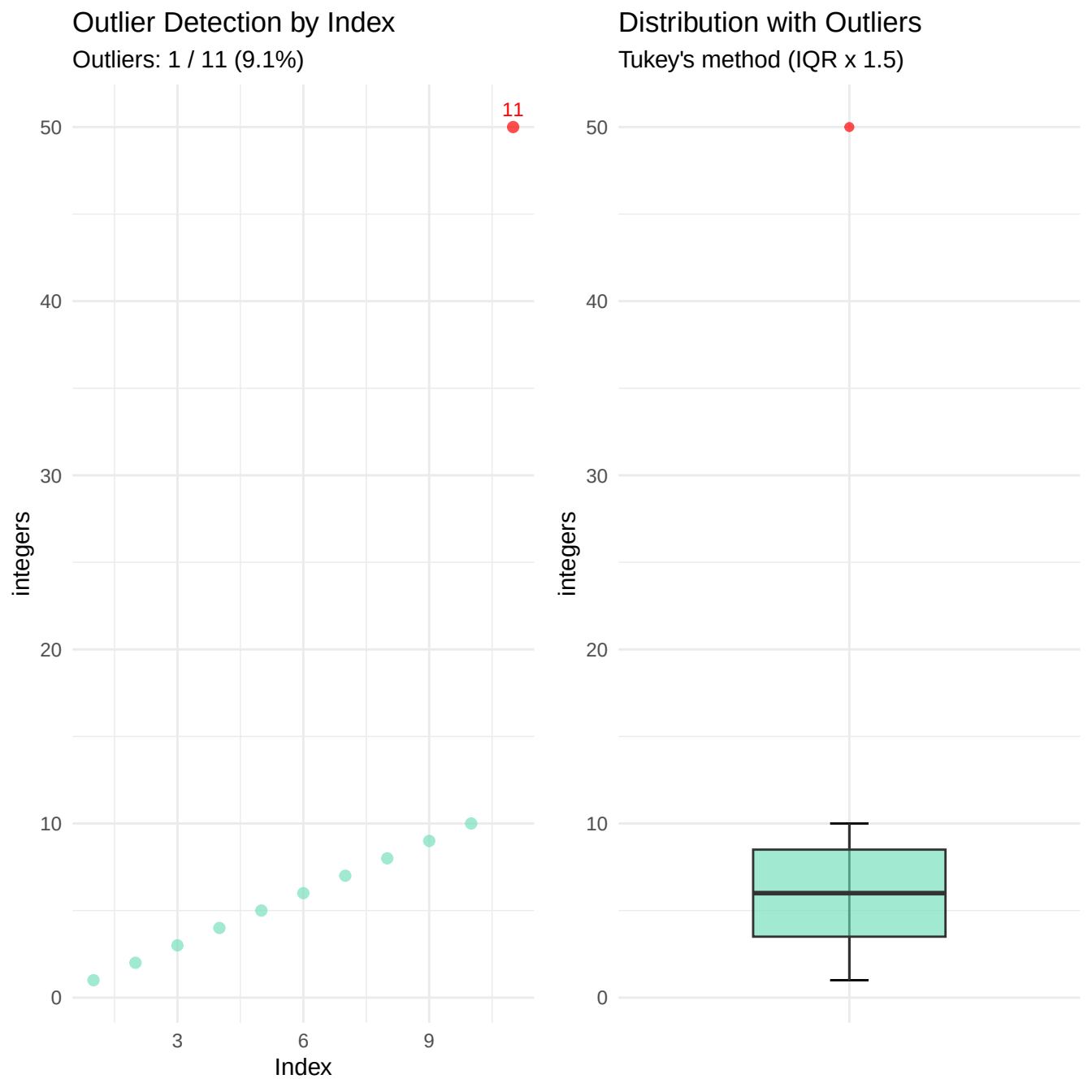

Outlier Detection by Index
Outliers: 0 / 4 (0.0%)
min_obs
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
min_obs

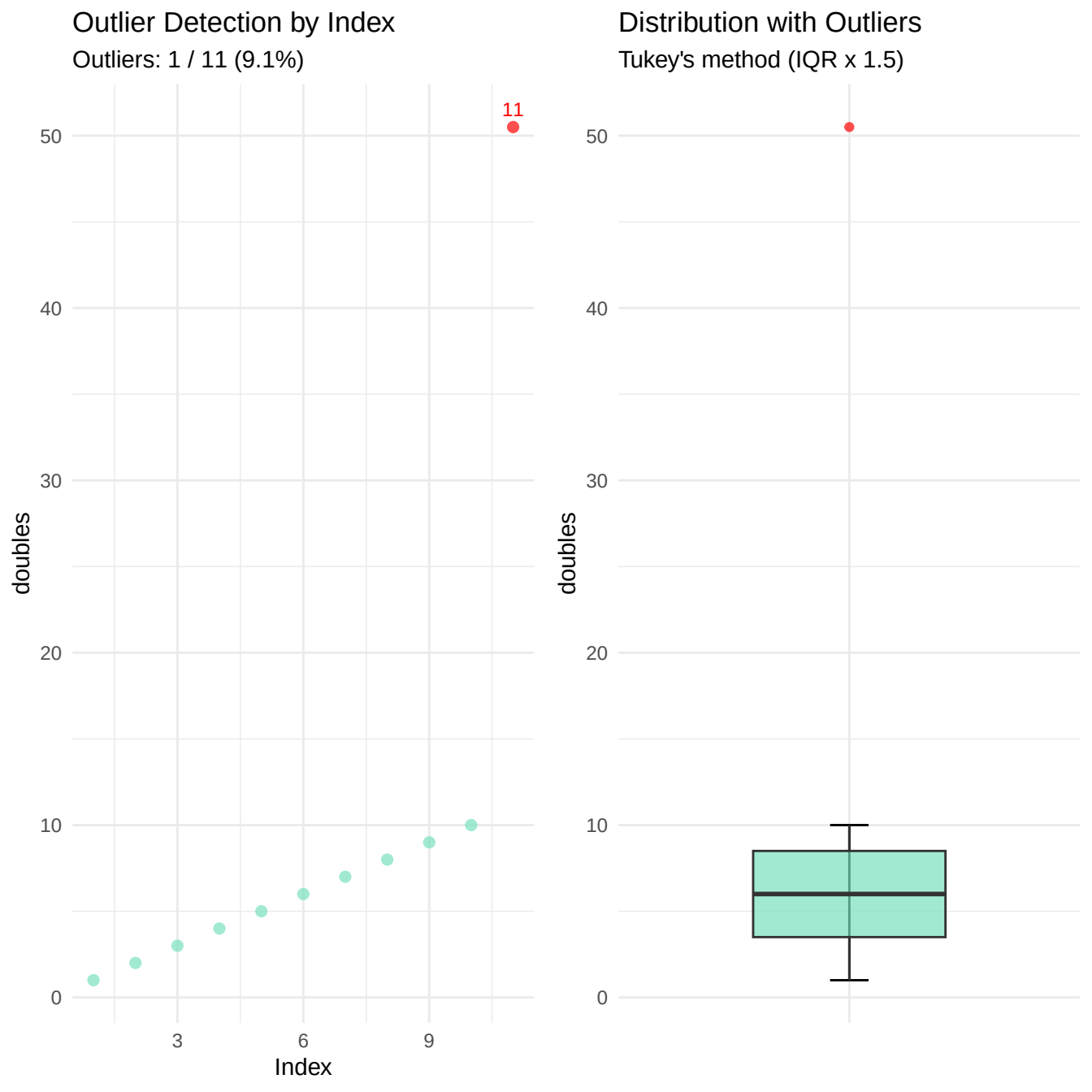

Outlier Detection by Index
Outliers: 1 / 11 (9.1%)
11
50
40
30
20
10
0
vals
3
6
9
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
50
40
30
20
10
0
vals

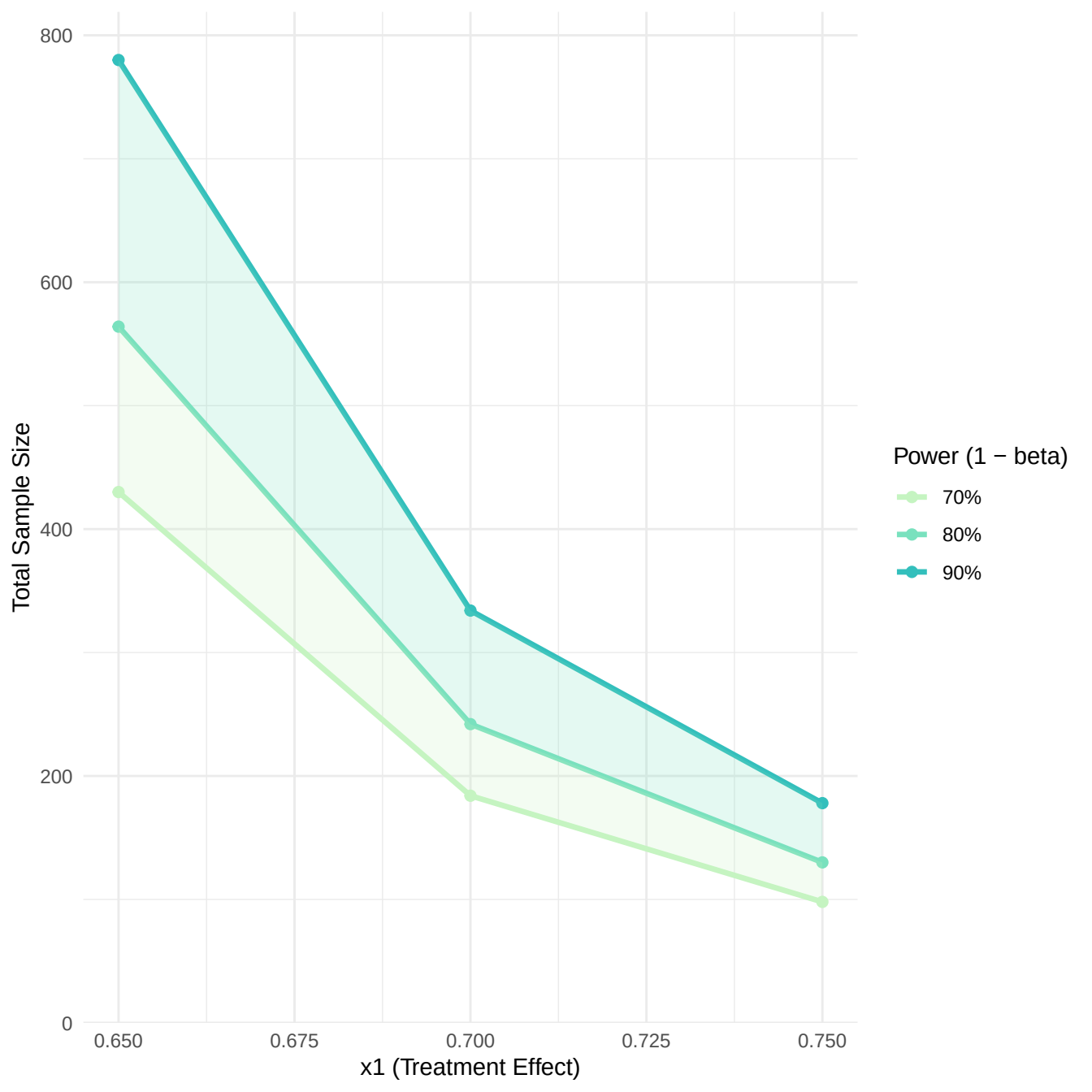

Outlier Detection by Index
Outliers: 2 / 13 (15.4%)
1000
500
0
−500
−1000
extreme
12
13
5
10
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
1000
500
0
−500
−1000
extreme

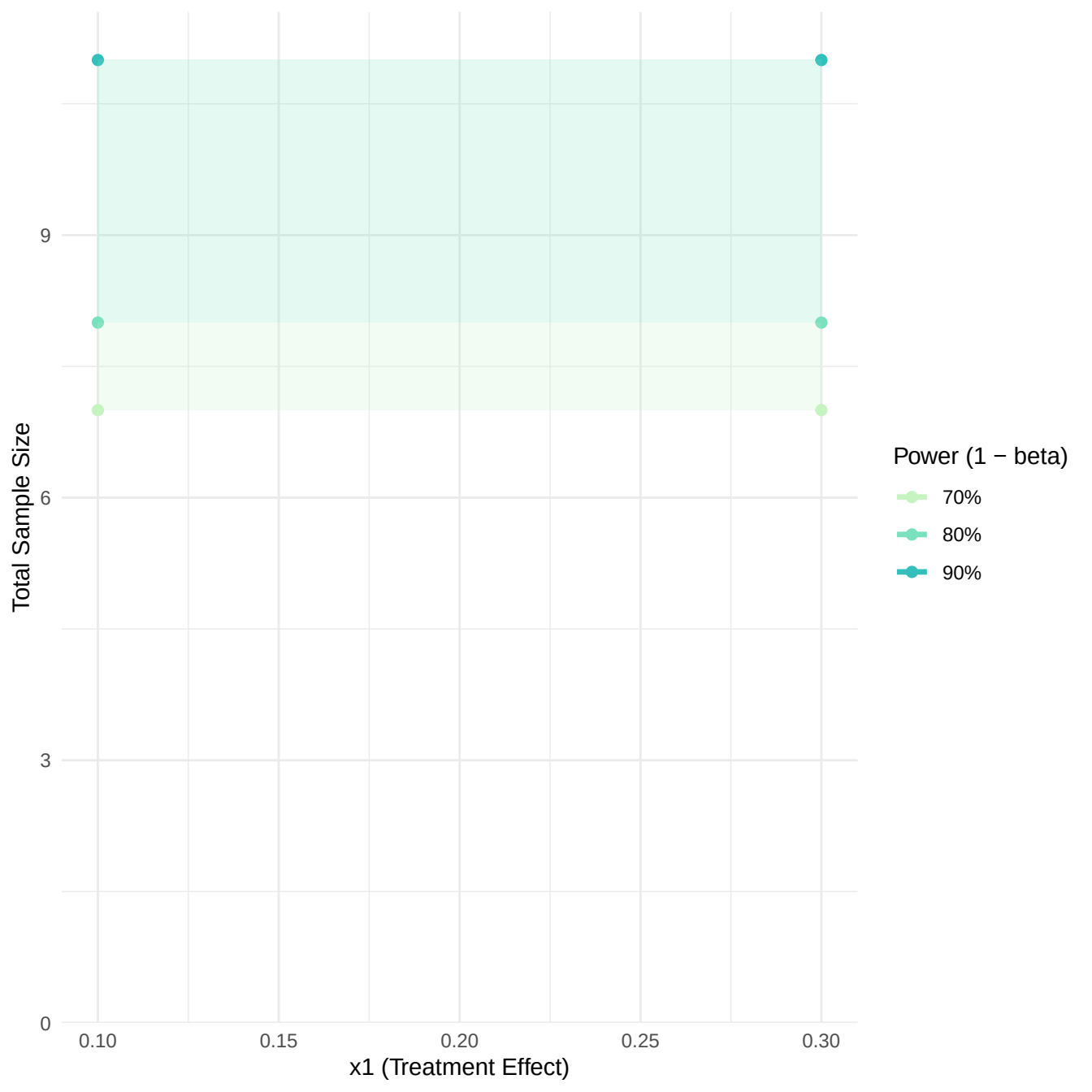

Outlier Detection by Index
Outliers: 1 / 11 (9.1%)
11
100
75
50
25
0
vals
3
6
9
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
100
75
50
25
0
vals

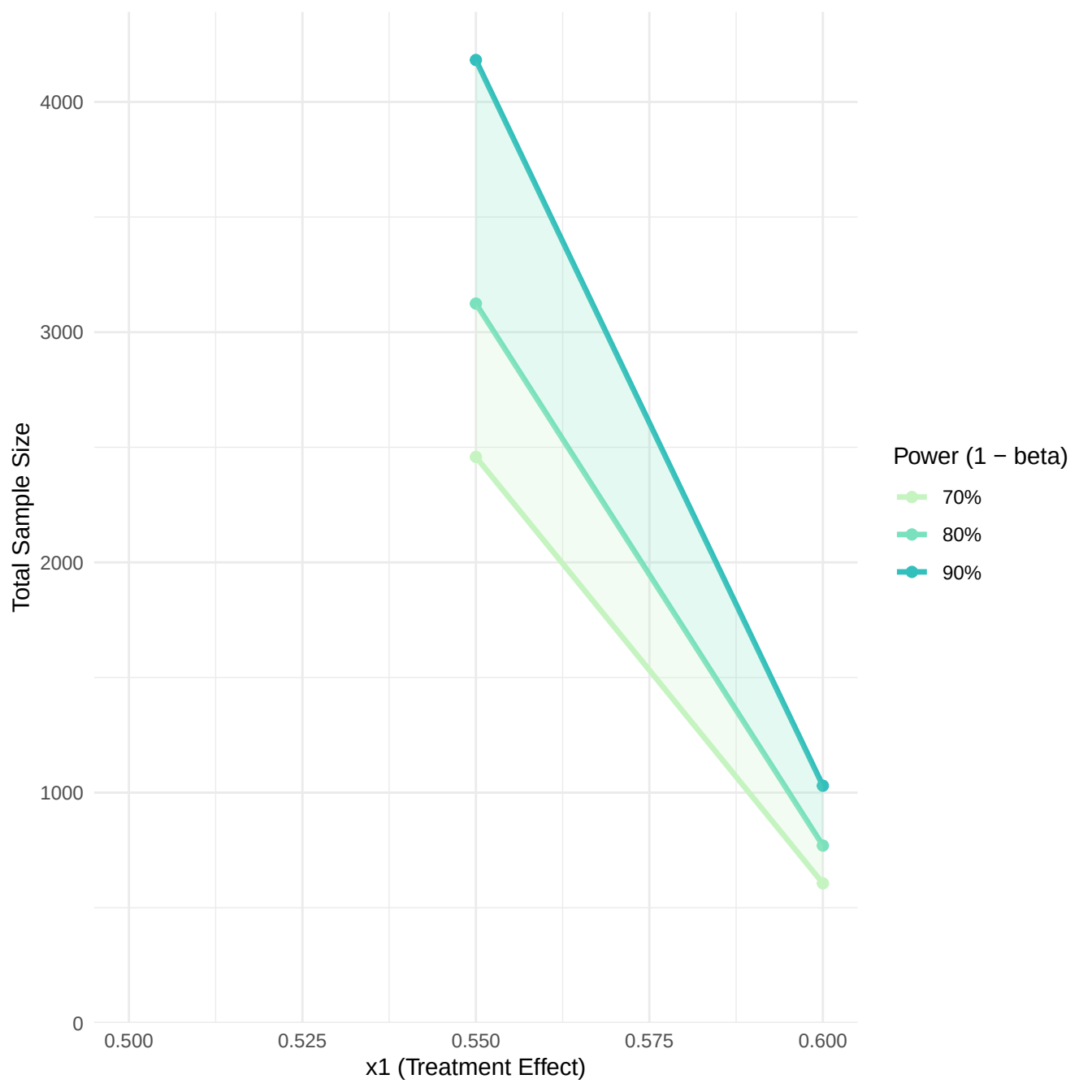

Outlier Detection by Index
Outliers: 2 / 12 (16.7%)
11
12
40
20
0
−20
data_points
2.5
5.0
7.5
10.0
12.5
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
40
20
0
−20
data_points


Outlier Detection by Index
Outliers: 1 / 11 (9.1%)
11
50
40
30
20
10
0
integers
3
6
9
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
50
40
30
20
10
0
integers


Outlier Detection by Index
Outliers: 1 / 11 (9.1%)
11
50
40
30
20
10
0
doubles
3
6
9
Index
Distribution with Outliers
Tukey's method (IQR x 1.5)
50
40
30
20
10
0
doubles


800
600
400
200
0
Total Sample Size
0.650
0.675
0.700
0.725
0.750
x1 (Treatment Effect)
Power (1 − beta)
70%
80%
90%


Total Sample Size
0
3
6
9
0.10
0.15
0.20
0.25
0.30
x1 (Treatment Effect)
Power (1 − beta)
70%
80%
90%


Total Sample Size
4000
3000
2000
1000
0
0.500
0.525
0.550
0.575
0.600
x1 (Treatment Effect)
Power (1 − beta)
70%
80%
90%