Two−Sample Kolmogorov−Smirnov Test

Test: Two−Sample Kolmogorov−Smirnov Test

Design: Maximum ECDF separation in absence counts between female and male students.

Variables: absences, sex

Null hypothesis: The two complete absence distributions are identical.

Formula: D = sup_x |F_F(x)−F_M(x)|; tied−count significance uses fixed−size label permutations.

Source rows: 649

Calculated metrics:

d_statistic: 0.0501874791417185

p_value: 0.505649435056494

permutation_null_mean: 0.0521758642690273

permutations: 10000

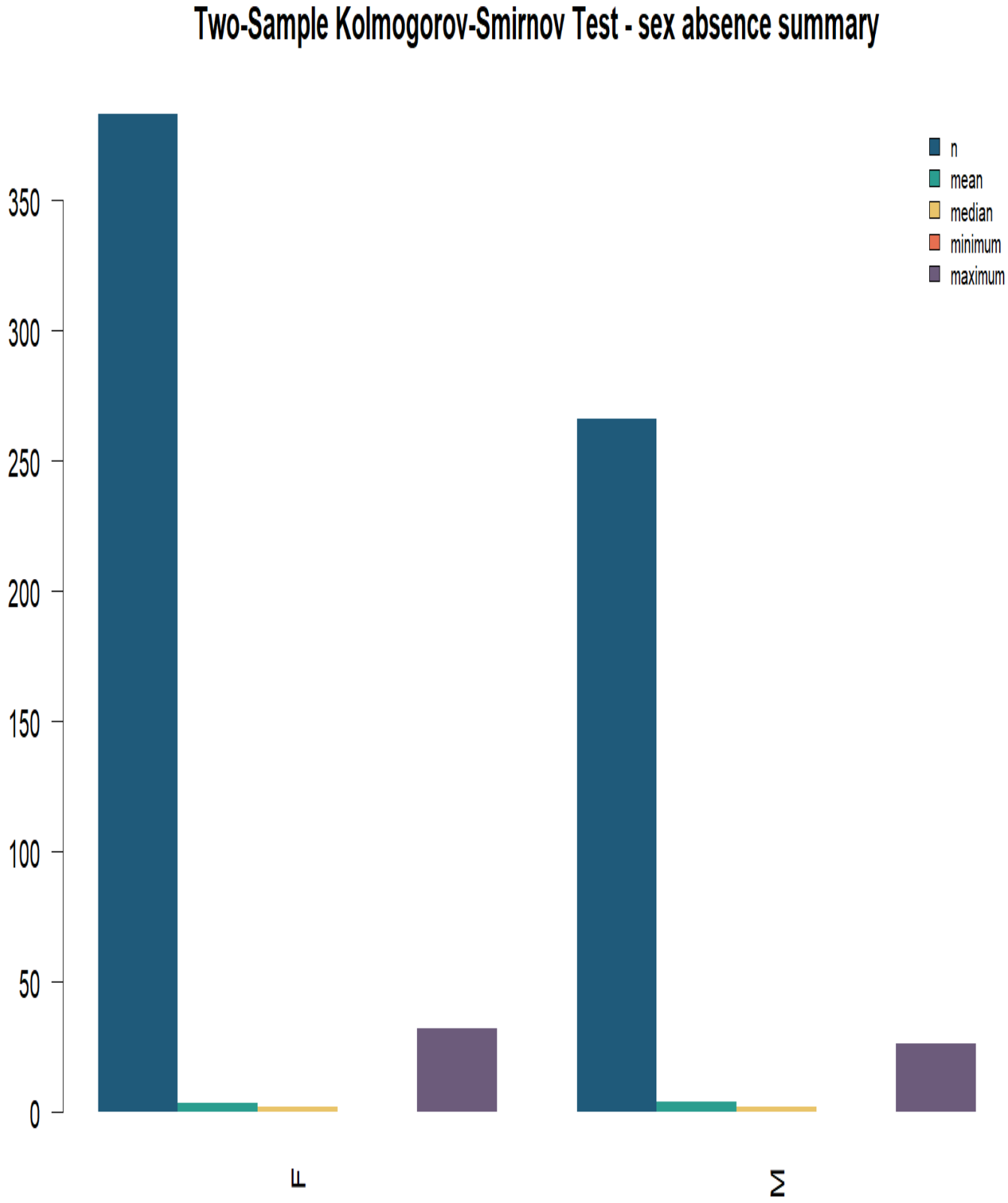
seed: 20260716

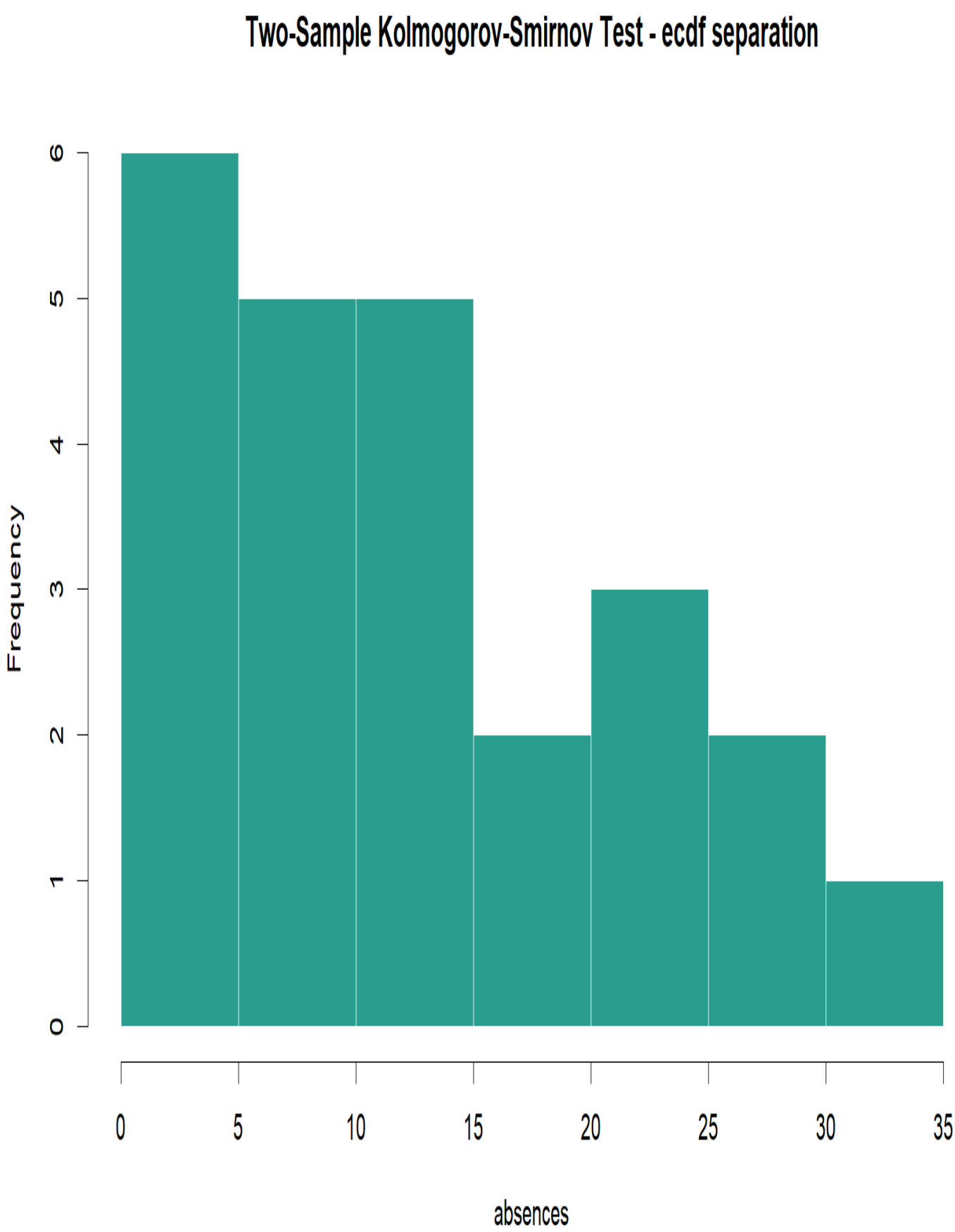
Interpretation:

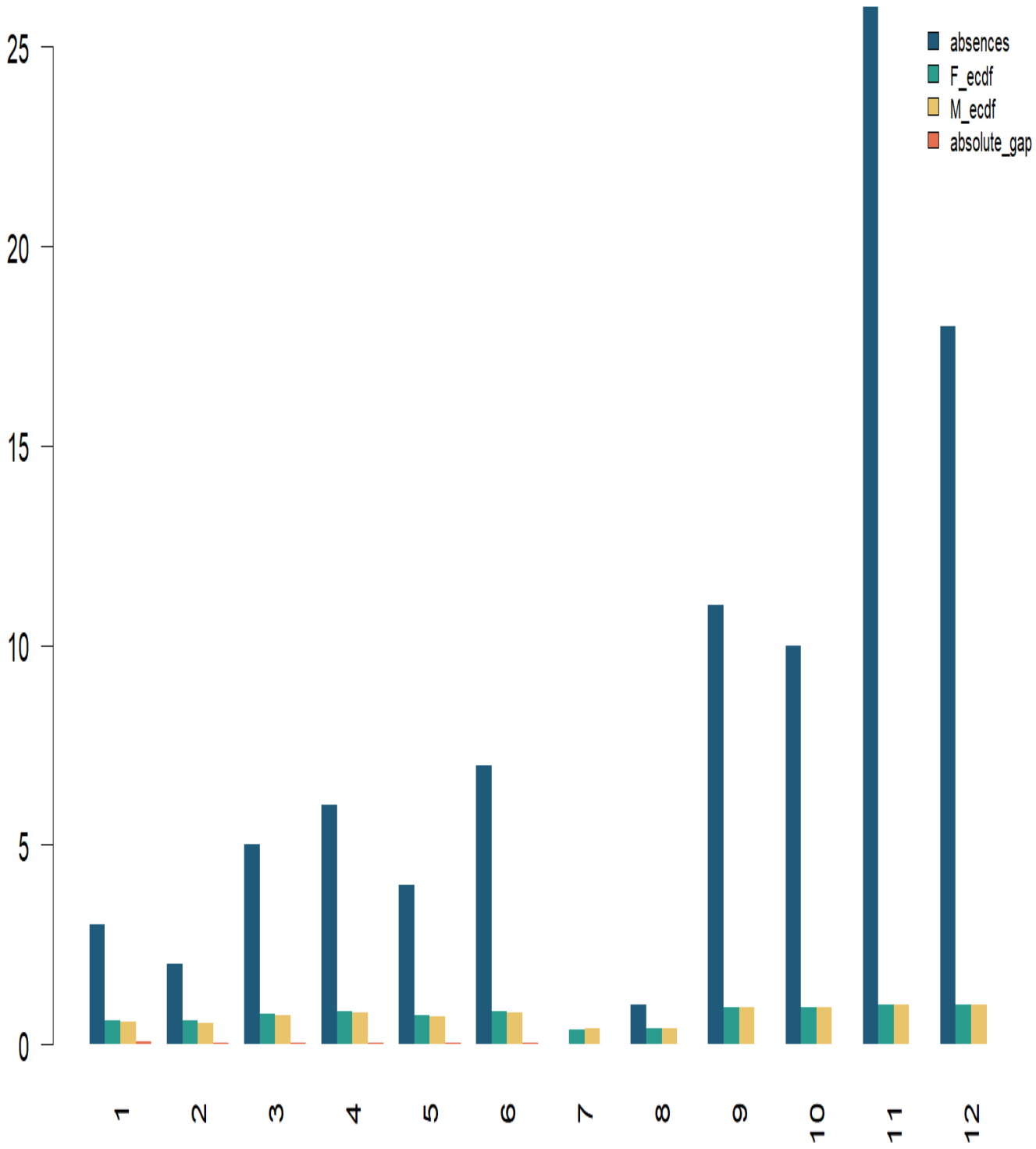
Permutation inference handles the extensive ties in absence counts.

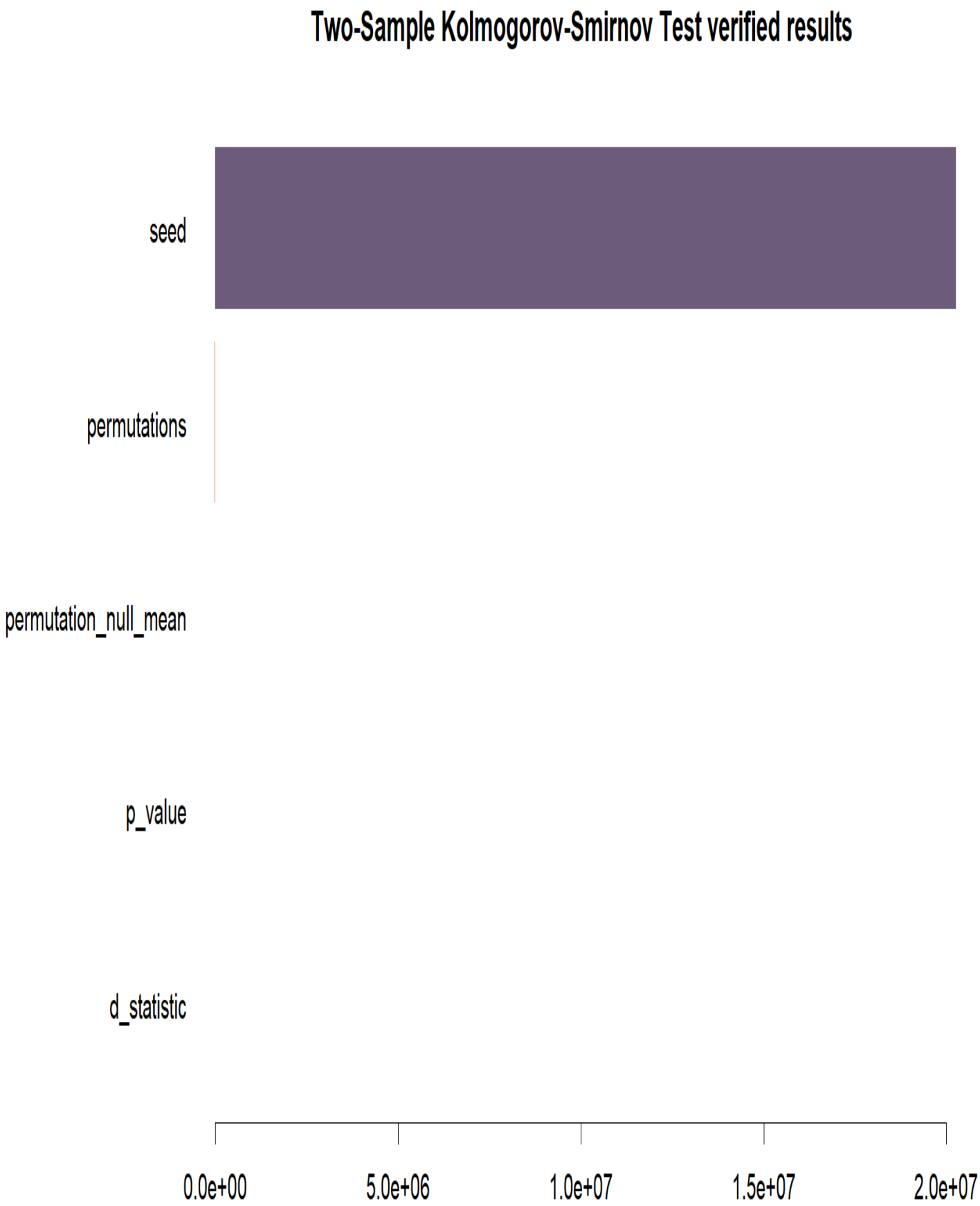
Permutation p = 0.505649435056494

Two-Sample Kolmogorov-Smirnov Test - primary metrics
2.0e+07
1.5e+07
1.0e+07
5.0e+06
0.0e+00
value
d_statistic
p_value
ation_null_mean
permutations
seed


Two-Sample Kolmogorov-Smirnov Test - sex absence summary
n
mean
median
minimum
maximum
350
300
250
200
150
100
50
0
F
M


Two-Sample Kolmogorov-Smirnov Test - ecdf separation
Frequency
0
1
2
3
4
5
6
0
5
10
15
20
25
30
35
absences


Two-Sample Kolmogorov-Smirnov Test - maximum gap rows
absences
F_ecdf
M_ecdf
absolute_gap
25
20
15
10
5
0
1
2
3
4
5
6
7
8
9
10
11
12


Two-Sample Kolmogorov-Smirnov Test verified results
seed
permutations
permutation_null_mean
p_value
d_statistic
0.0e+00
5.0e+06
1.0e+07
1.5e+07
2.0e+07