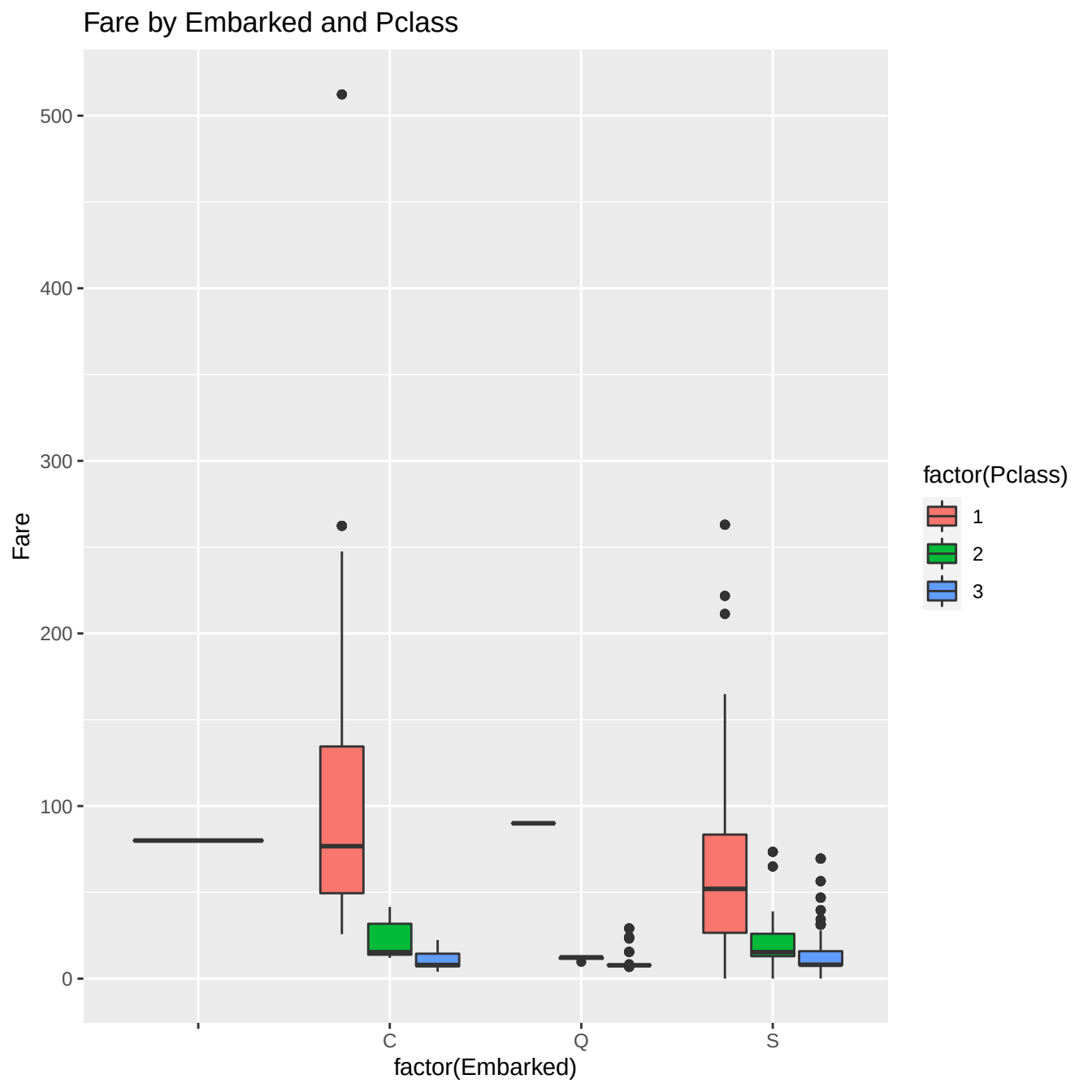
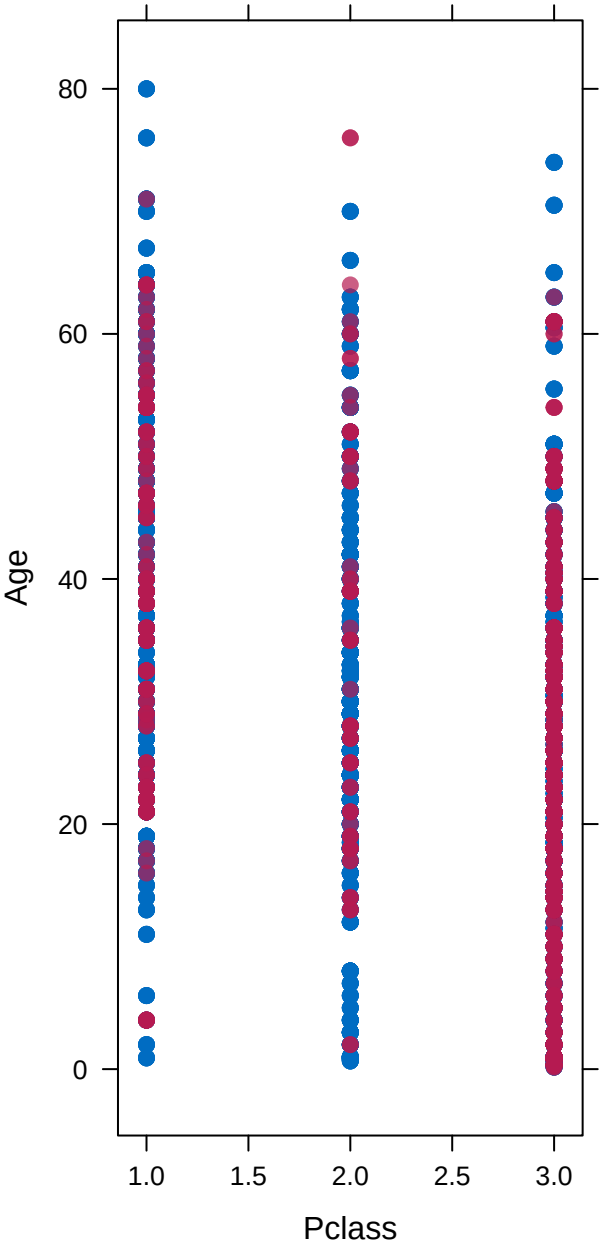
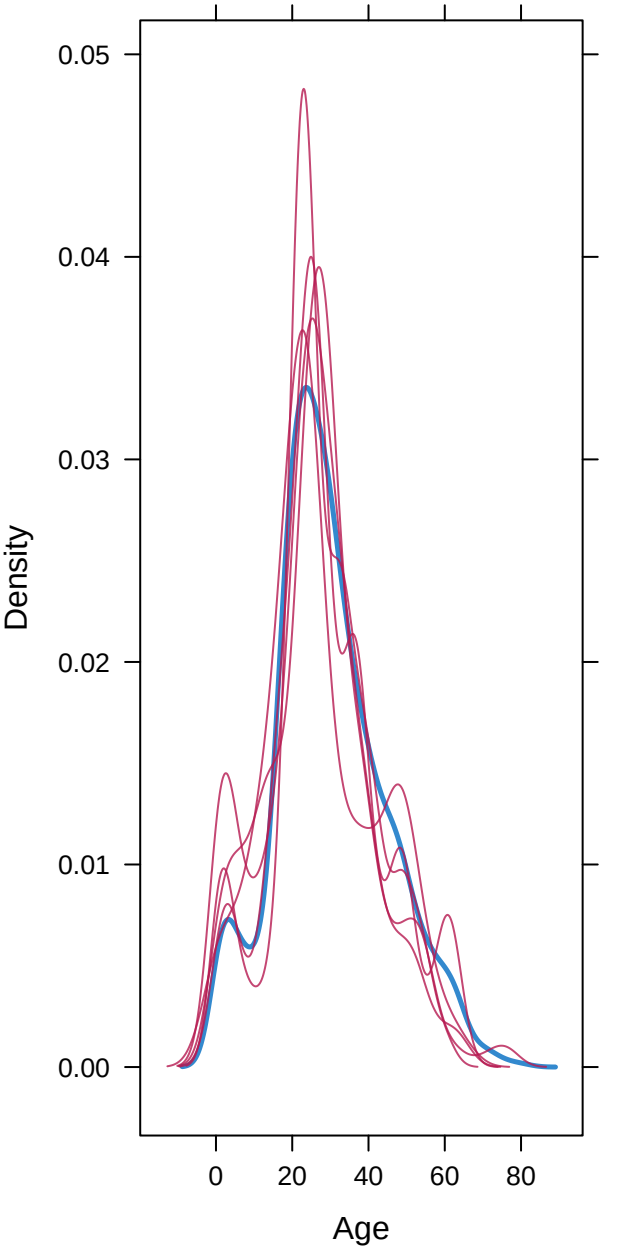
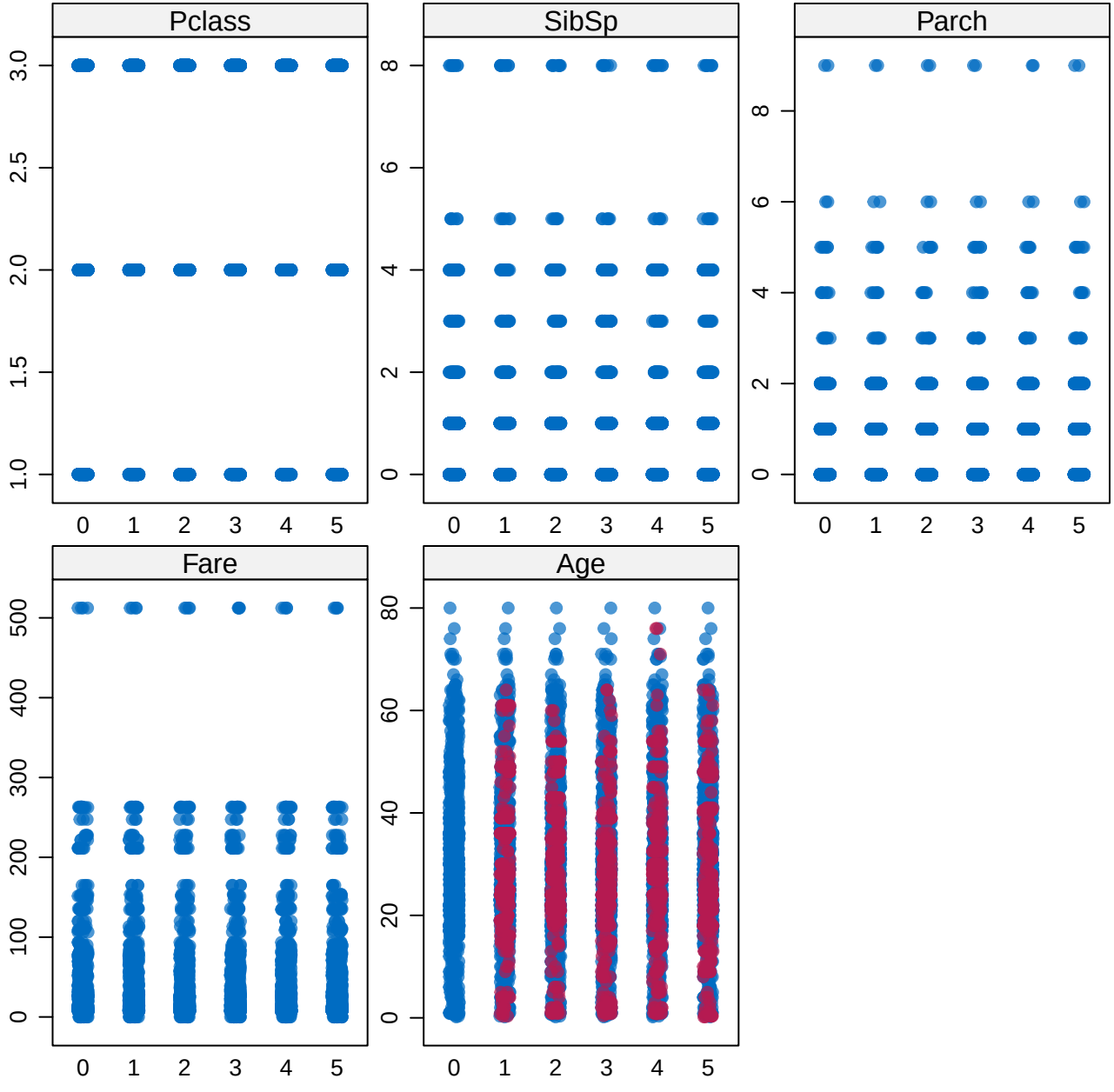
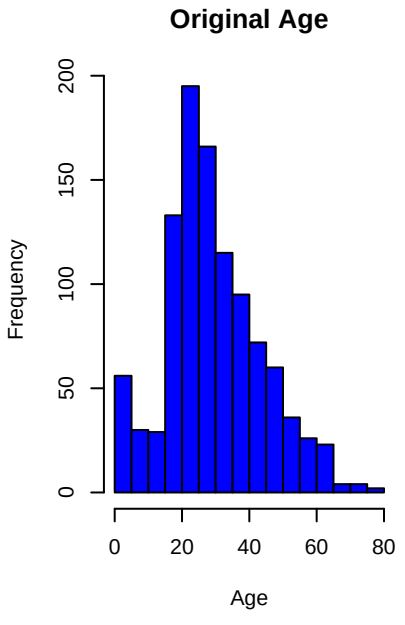
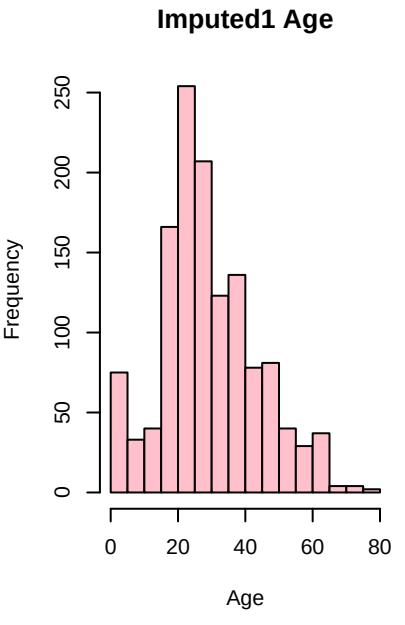

Fare by Embarked and Pclass
Fare
500
400
300
200
100
0
C
Q
S
factor(Embarked)
factor(Pclass)
1
2
3

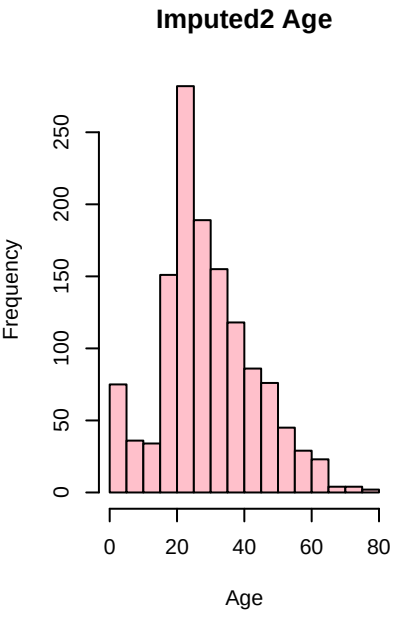

Age
80
60
40
20
0
1.0
1.5
2.0
2.5
3.0
Pclass

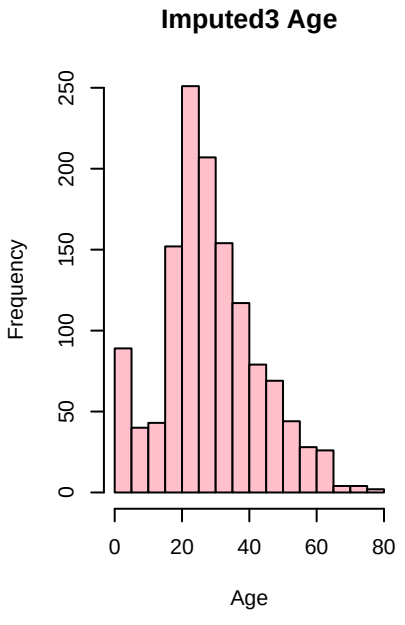

Density
0.05
0.04
0.03
0.02
0.01
0.00
0
20
40
60
80
Age

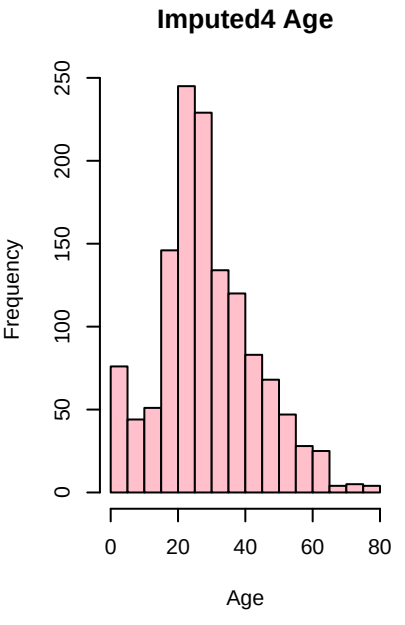

Pclass
SibSp
Parch
Fare
Age
0
1
2
3
4
5
1.0
1.5
2.0
2.5
3.0
0
2
4
6
8
0
100
200
300
400
500
0
20
40
60
80

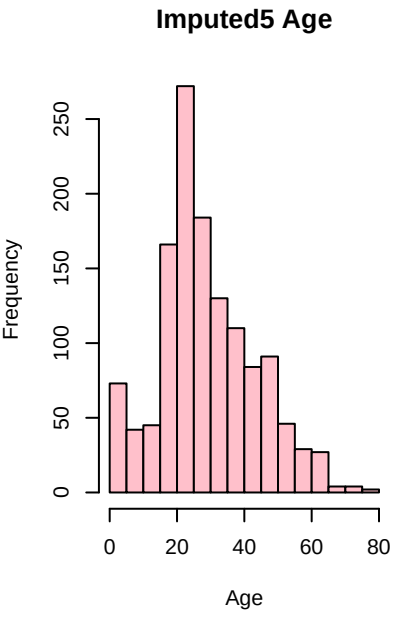

Original Age
Frequency
0
50
100
150
200
0
20
40
60
80
Age

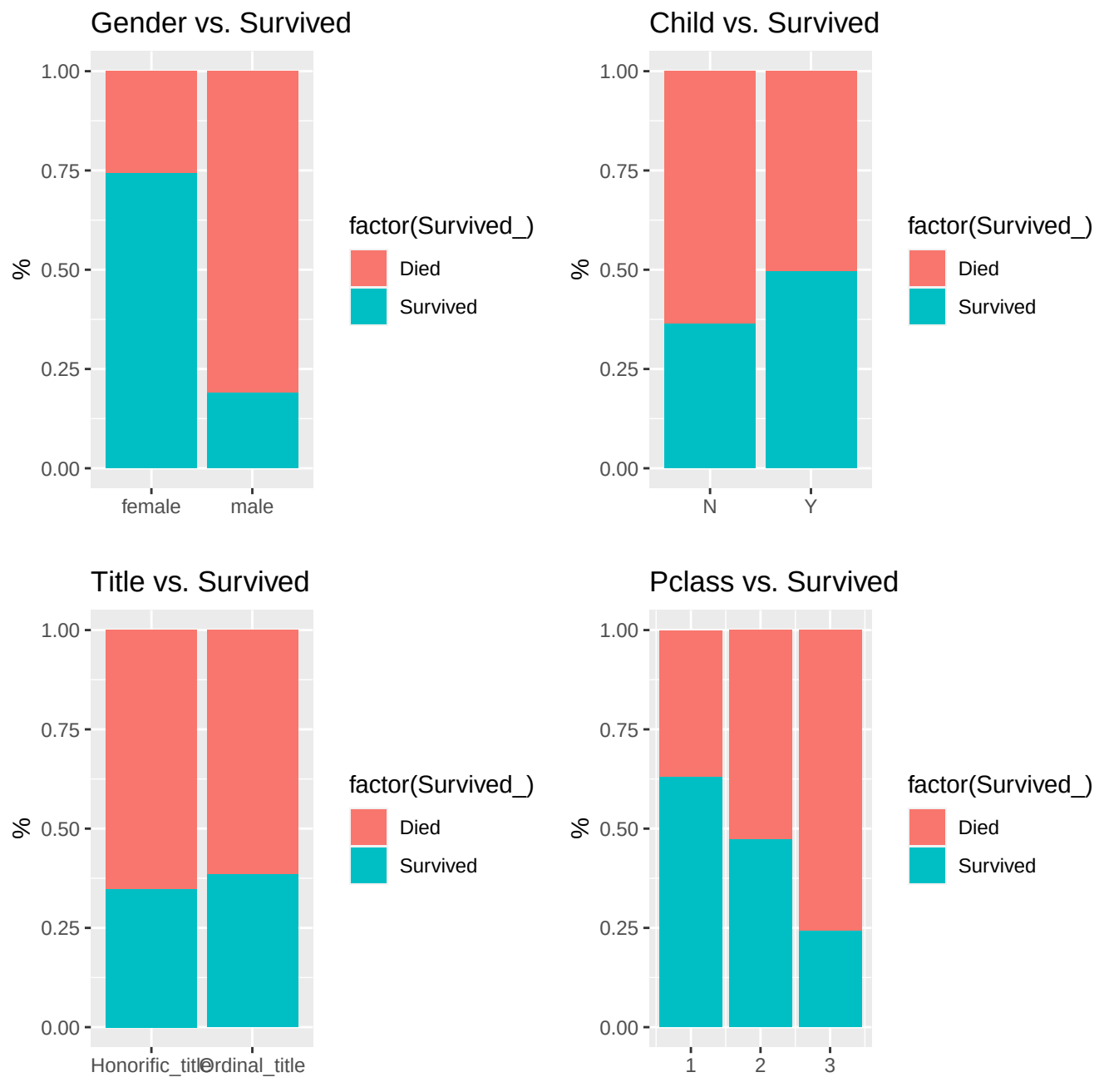

Imputed1 Age
Frequency
0
50
100
150
200
250
0
20
40
60
80
Age

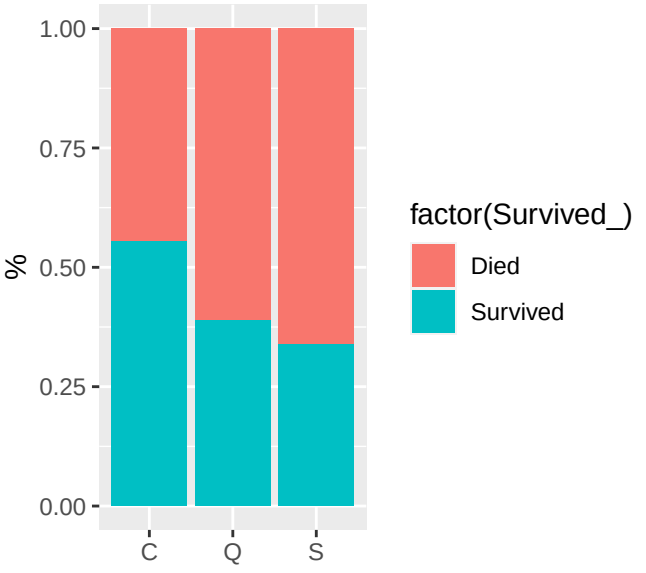

Imputed2 Age
Frequency
0
50
100
150
200
250
0
20
40
60
80
Age

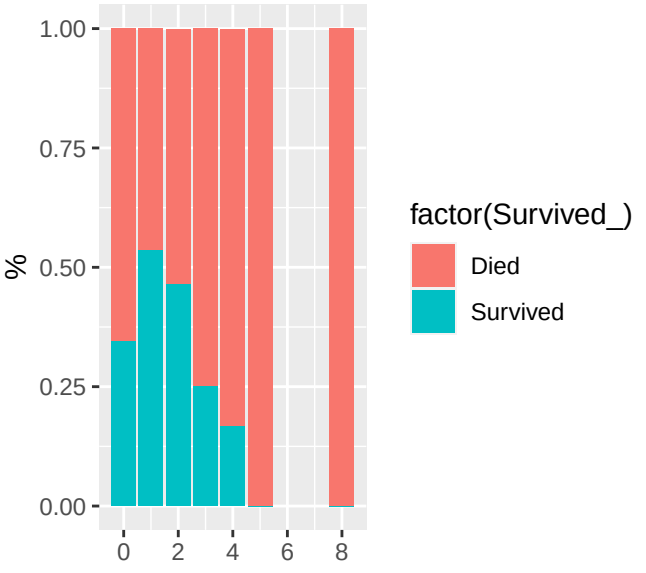

Imputed3 Age
Frequency
0
50
100
150
200
250
0
20
40
60
80
Age

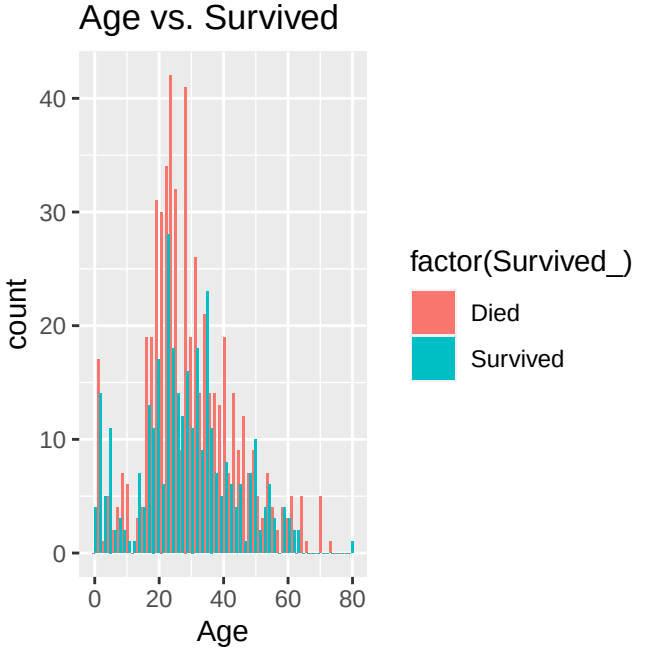

Imputed4 Age
Frequency
0
50
100
150
200
250
0
20
40
60
80
Age

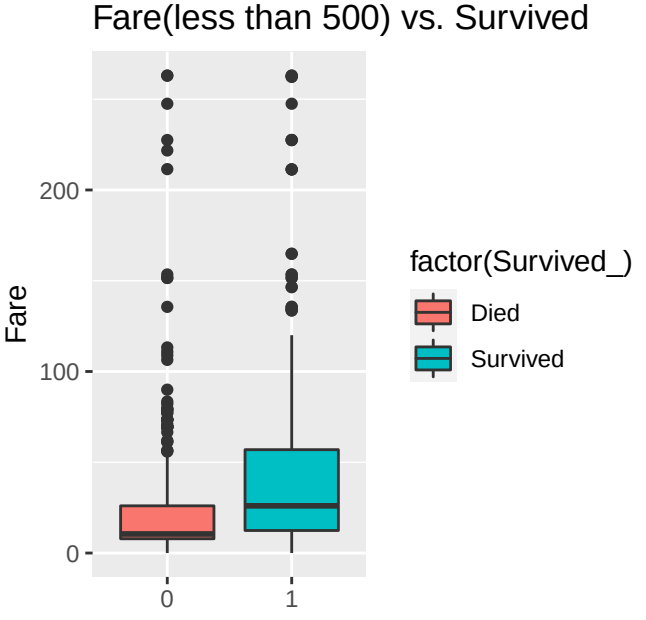

Imputed5 Age
Frequency
0
50
100
150
200
250
0
20
40
60
80
Age

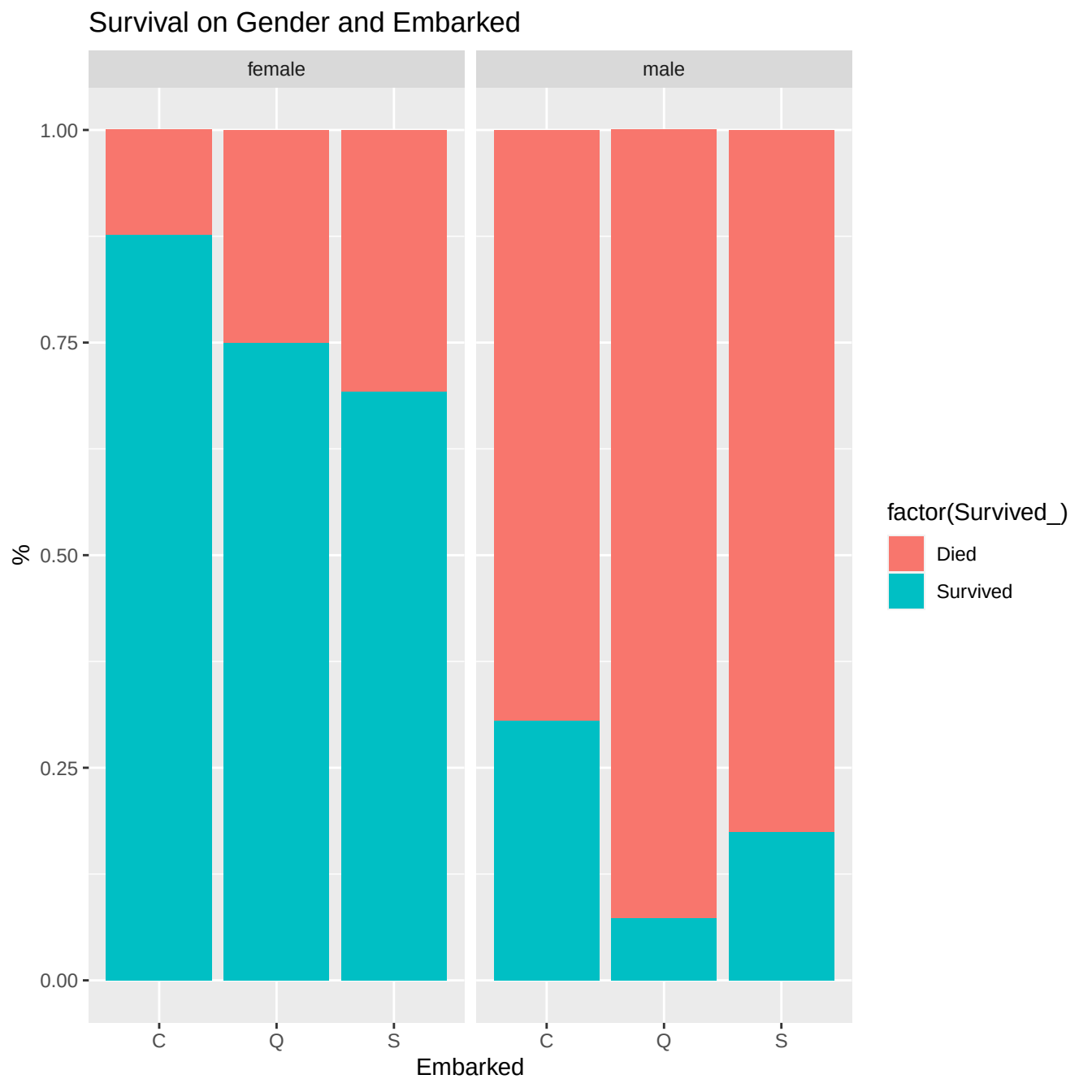

Gender vs. Survived
1.00
0.75
0.50
0.25
0.00
%
female
male
factor(Survived_)
Died
Survived
Child vs. Survived
1.00
0.75
0.50
0.25
0.00
%
N
Y
factor(Survived_)
Died
Survived
Title vs. Survived
1.00
0.75
0.50
0.25
0.00
%
Honorific_title
Ordinal_title
factor(Survived_)
Died
Survived
Pclass vs. Survived
1.00
0.75
0.50
0.25
0.00
%
1
2
3
factor(Survived_)
Died
Survived

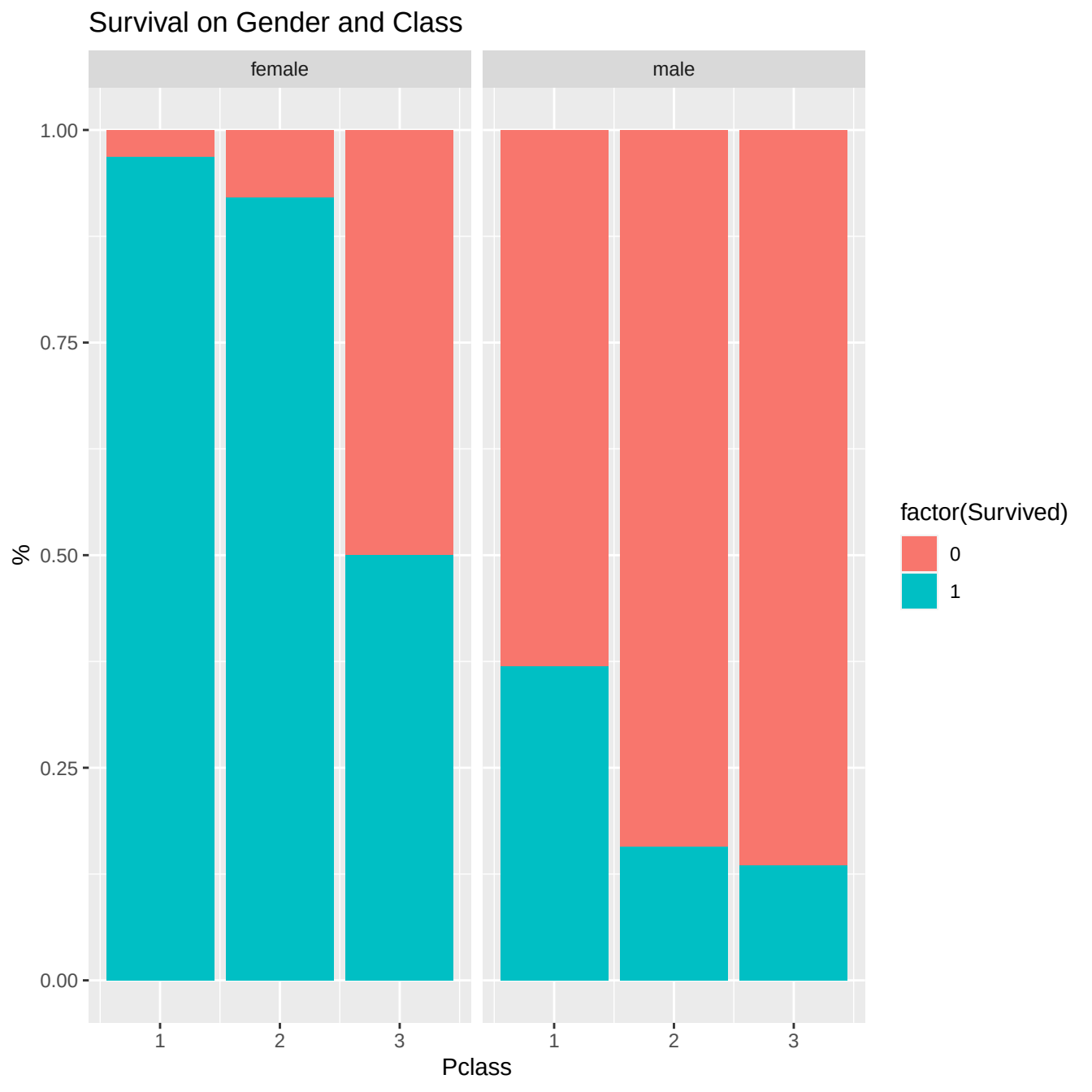

Embarked vs. Survived
1.00
0.75
0.50
0.25
0.00
%
C
Q
S
factor(Survived_)
Died
Survived

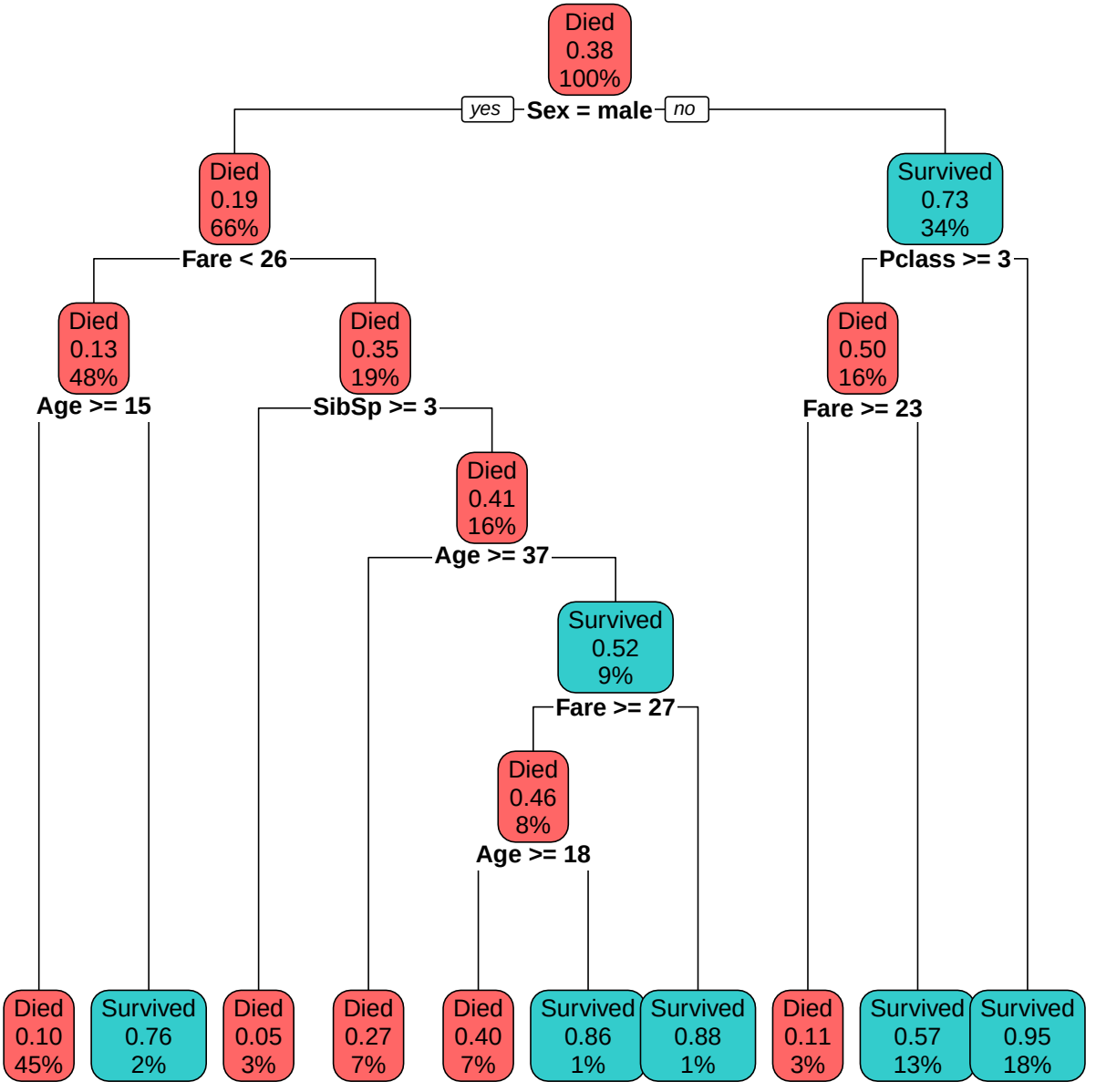

SibSp vs. Survived
1.00
0.75
0.50
0.25
0.00
%
0
2
4
6
8
factor(Survived_)
Died
Survived

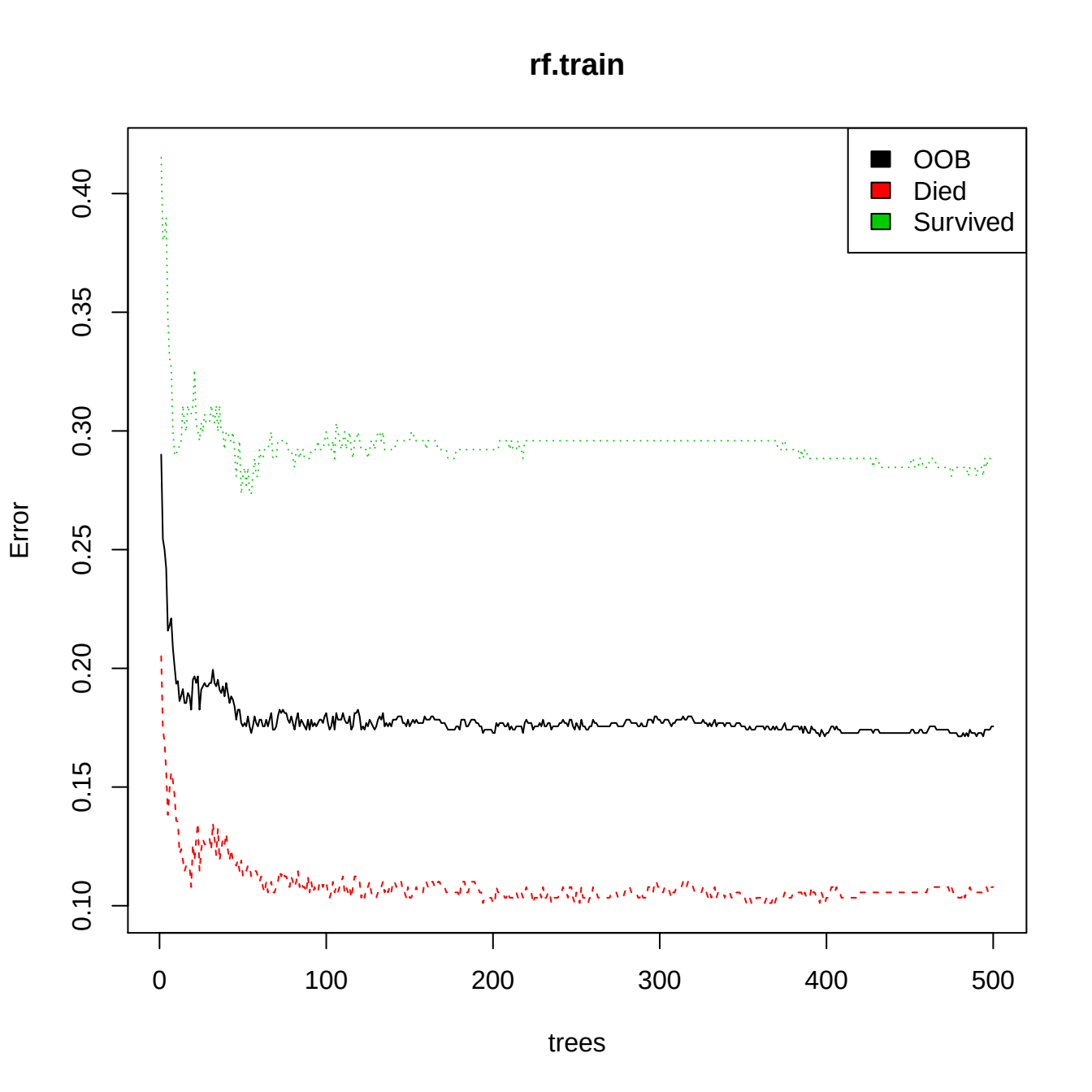

Age vs. Survived
40
30
20
10
0
count
0
20
40
60
80
Age
factor(Survived_)
Died
Survived

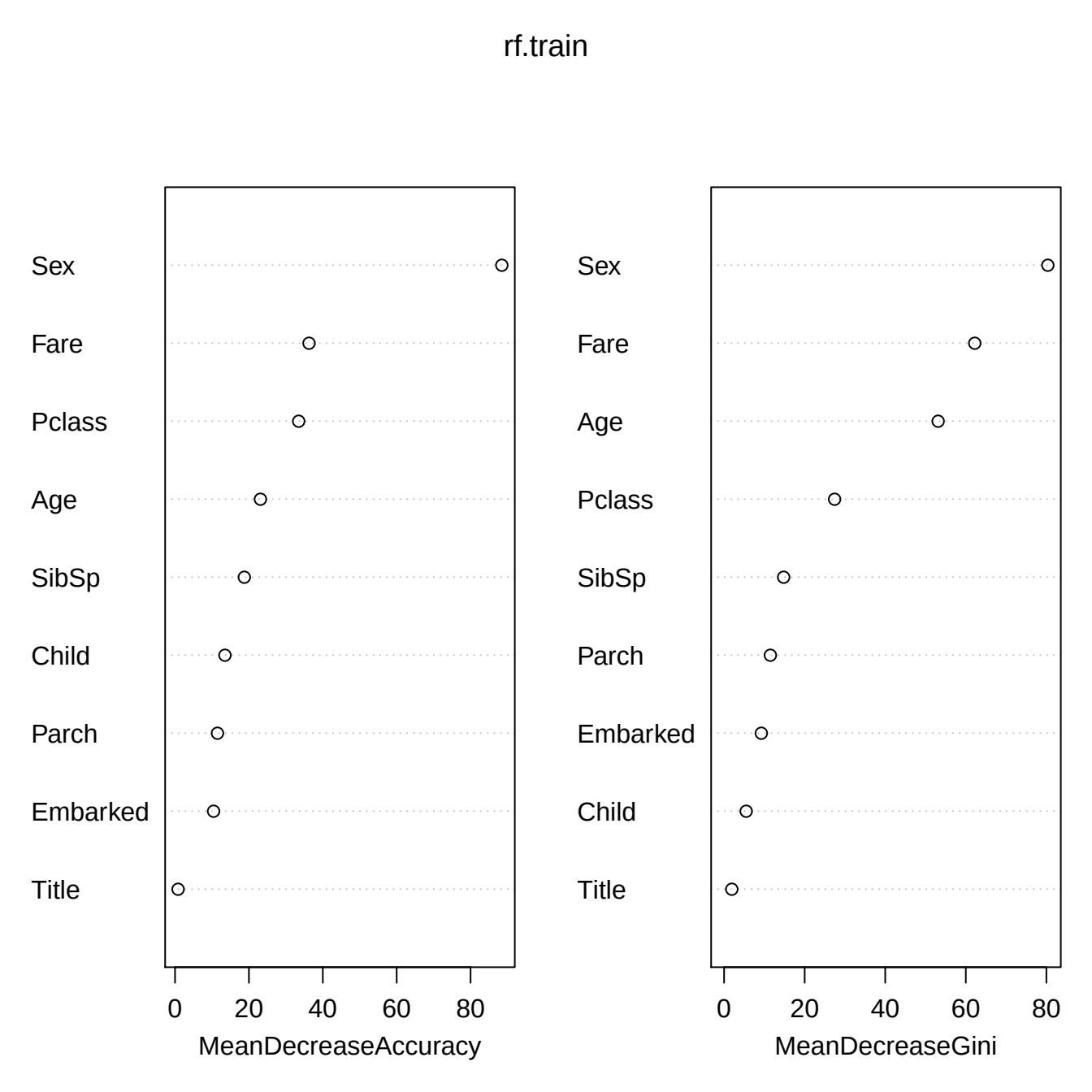

Fare(less than 500) vs. Survived
200
100
0
Fare
0
1
factor(Survived_)
Died
Survived

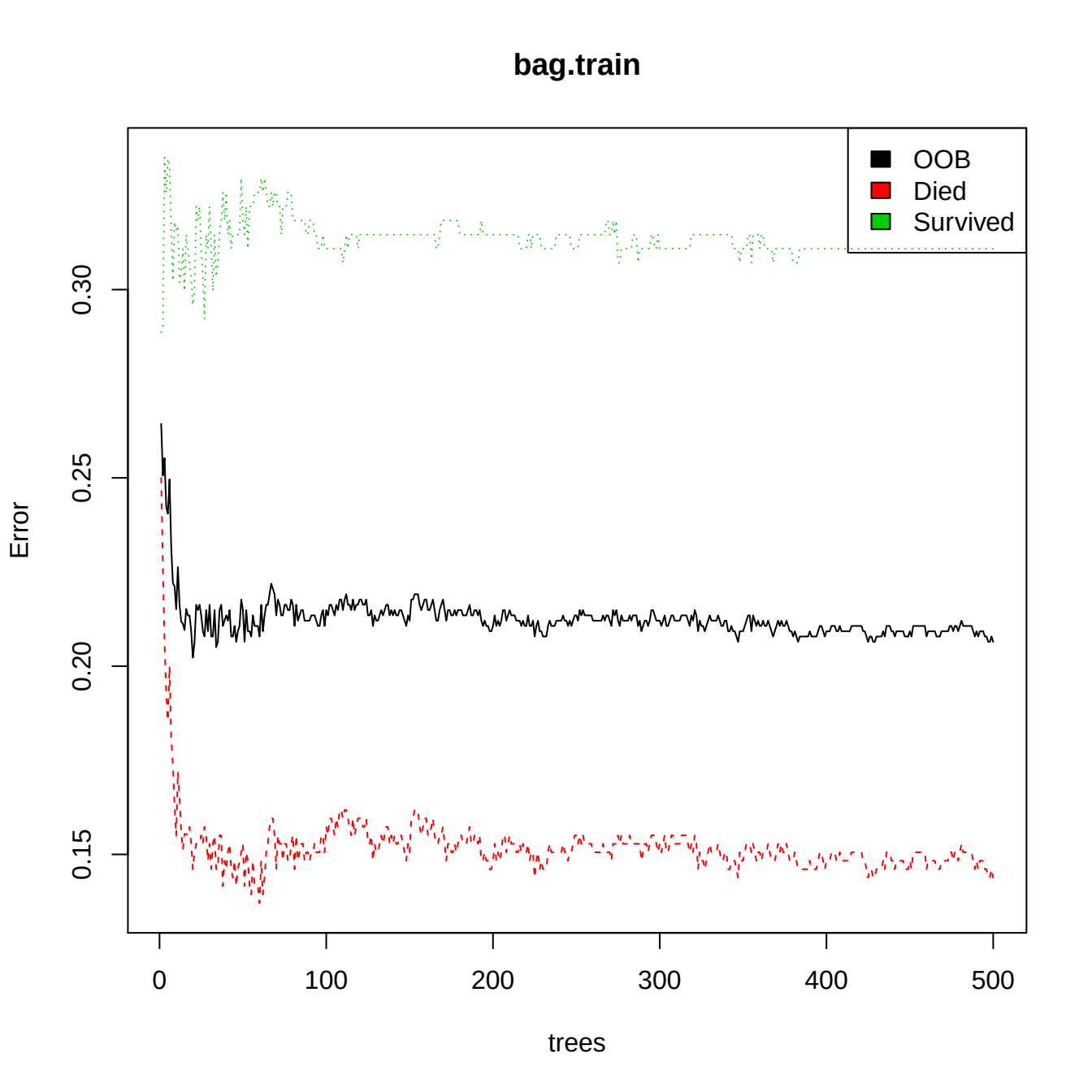

Survival on Gender and Embarked
female
male
1.00
0.75
0.50
0.25
0.00
%
C
Q
S
Embarked
factor(Survived_)
Died
Survived

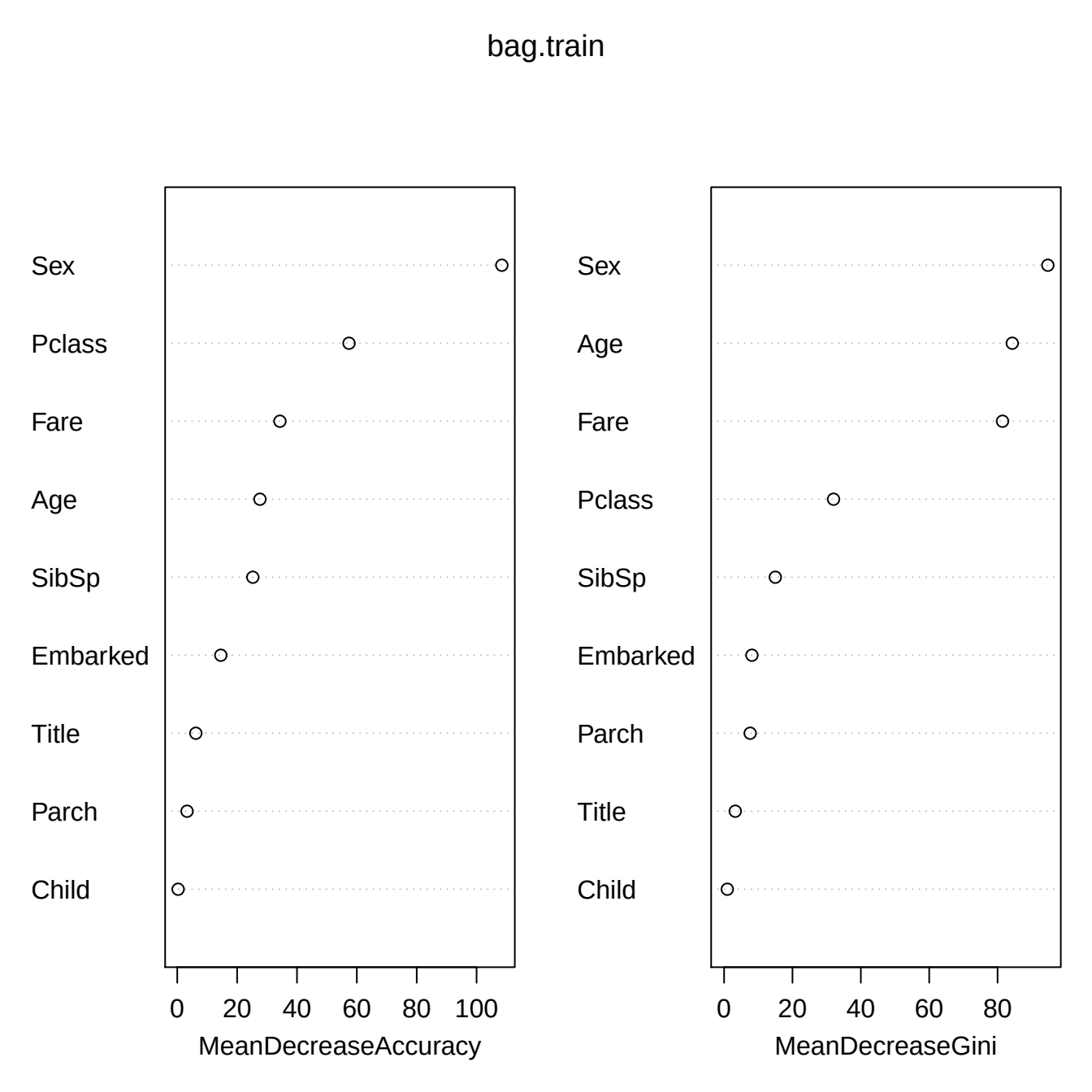

Survival on Gender and Class
female
male
1.00
0.75
0.50
0.25
0.00
%
1
2
3
1
2
3
Pclass
factor(Survived)
0
1


Died
0.38
100%
yes
Sex = male
no
Died
0.19
66%
Survived
0.73
34%
Fare < 26
Pclass >= 3
Died
0.13
48%
Died
0.35
19%
Died
0.50
16%
Age >= 15
SibSp >= 3
Fare >= 23
Died
0.41
16%
Age >= 37
Survived
0.52
9%
Fare >= 27
Died
0.46
8%
Age >= 18
Died
0.10
45%
Survived
0.76
2%
Died
0.05
3%
Died
0.27
7%
Died
0.40
7%
Survived
0.86
1%
Survived
0.88
1%
Died
0.11
3%
Survived
0.57
13%
Survived
0.95
18%


rf.train
OOB
Died
Survived
Error
0.10
0.15
0.20
0.25
0.30
0.35
0.40
0
100
200
300
400
500
trees


rf.train
Sex
Fare
Pclass
Age
SibSp
Child
Parch
Embarked
Title
0
20
40
60
80
MeanDecreaseAccuracy
Sex
Fare
Age
Pclass
SibSp
Parch
Embarked
Child
Title
0
20
40
60
80
MeanDecreaseGini


bag.train
OOB
Died
Survived
Error
0.15
0.20
0.25
0.30
0
100
200
300
400
500
trees


bag.train
Sex
Pclass
Fare
Age
SibSp
Embarked
Title
Parch
Child
0
20
40
60
80
100
MeanDecreaseAccuracy
Sex
Age
Fare
Pclass
SibSp
Embarked
Parch
Title
Child
0
20
40
60
80
MeanDecreaseGini