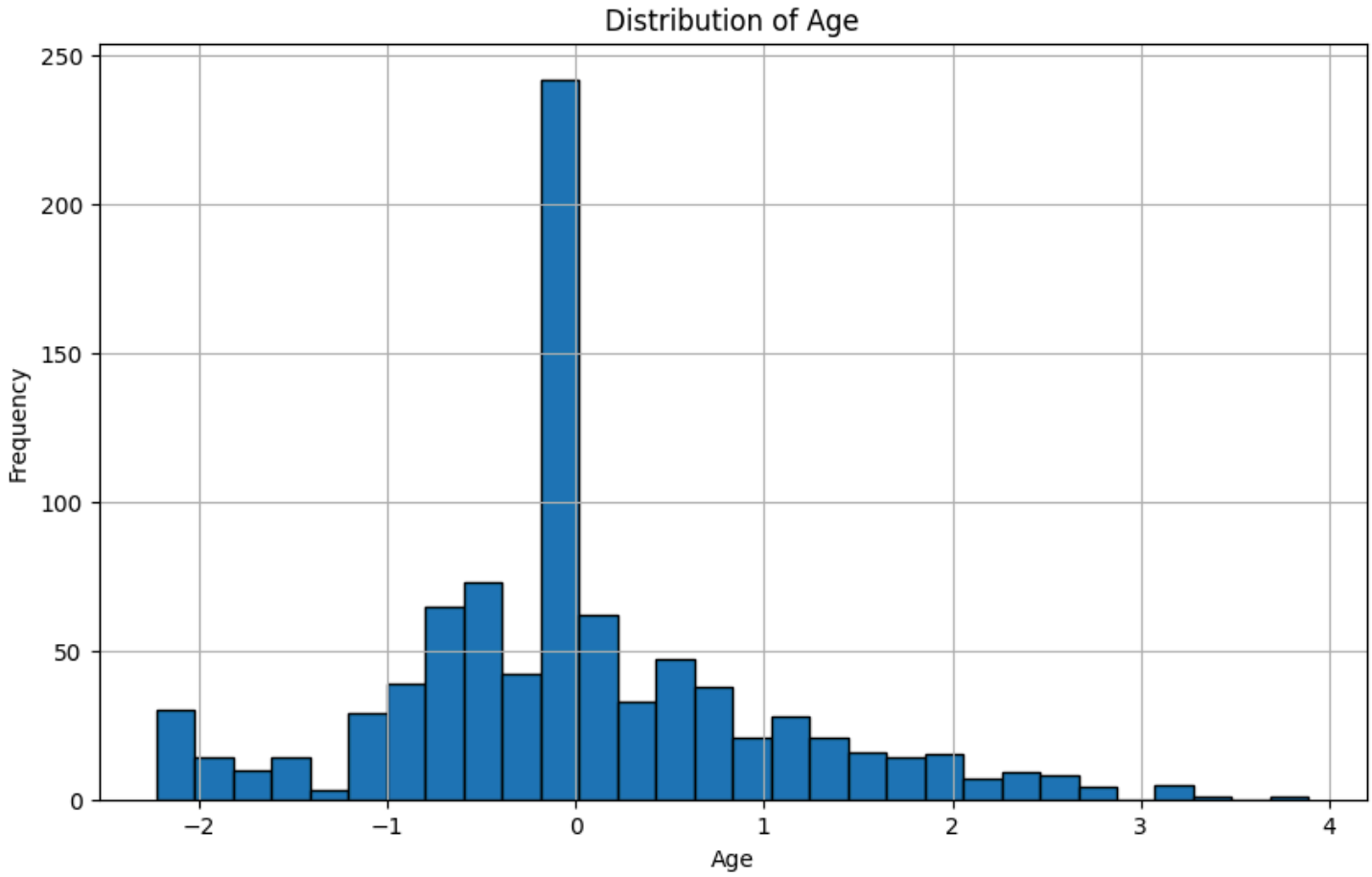
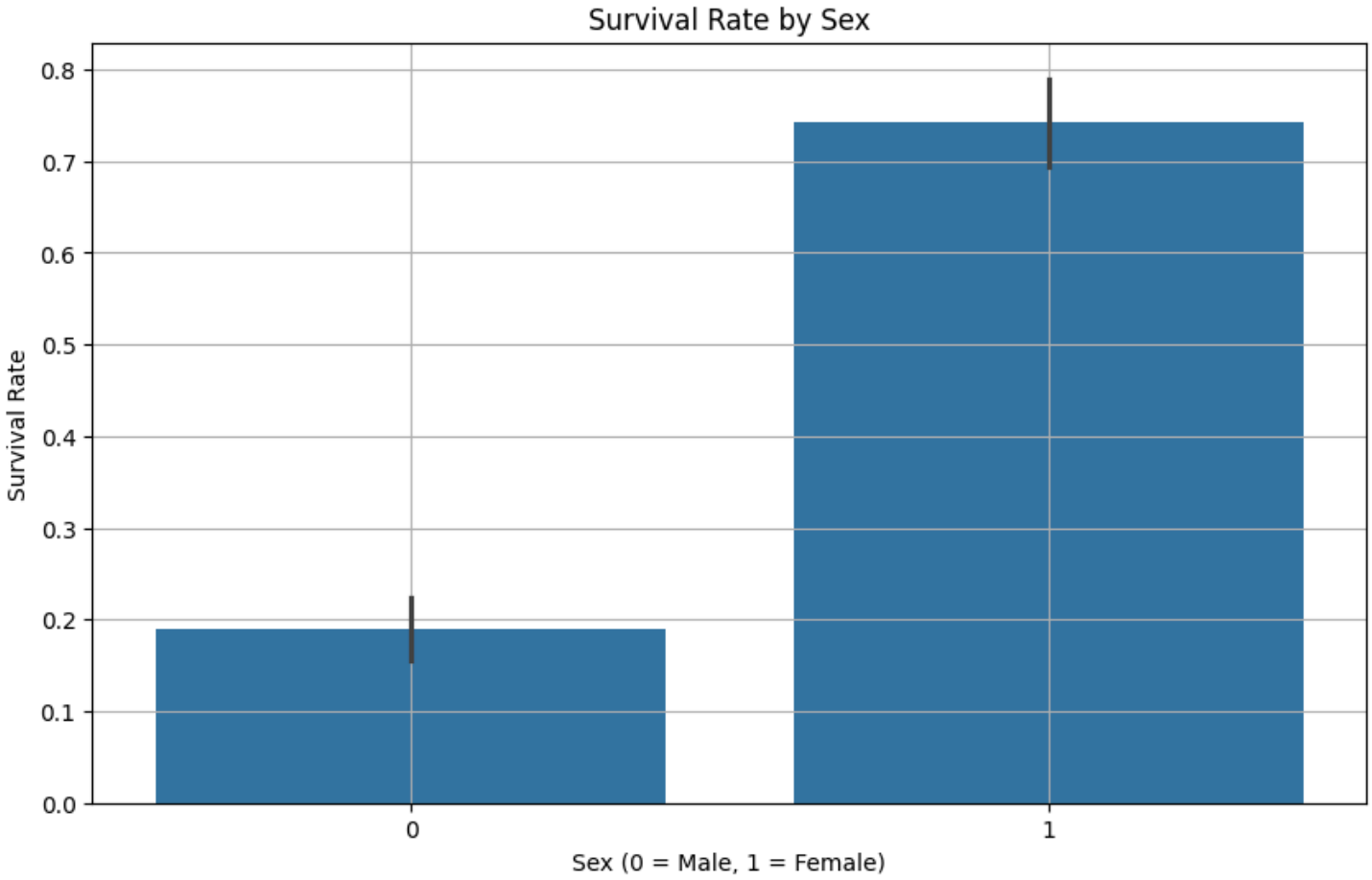
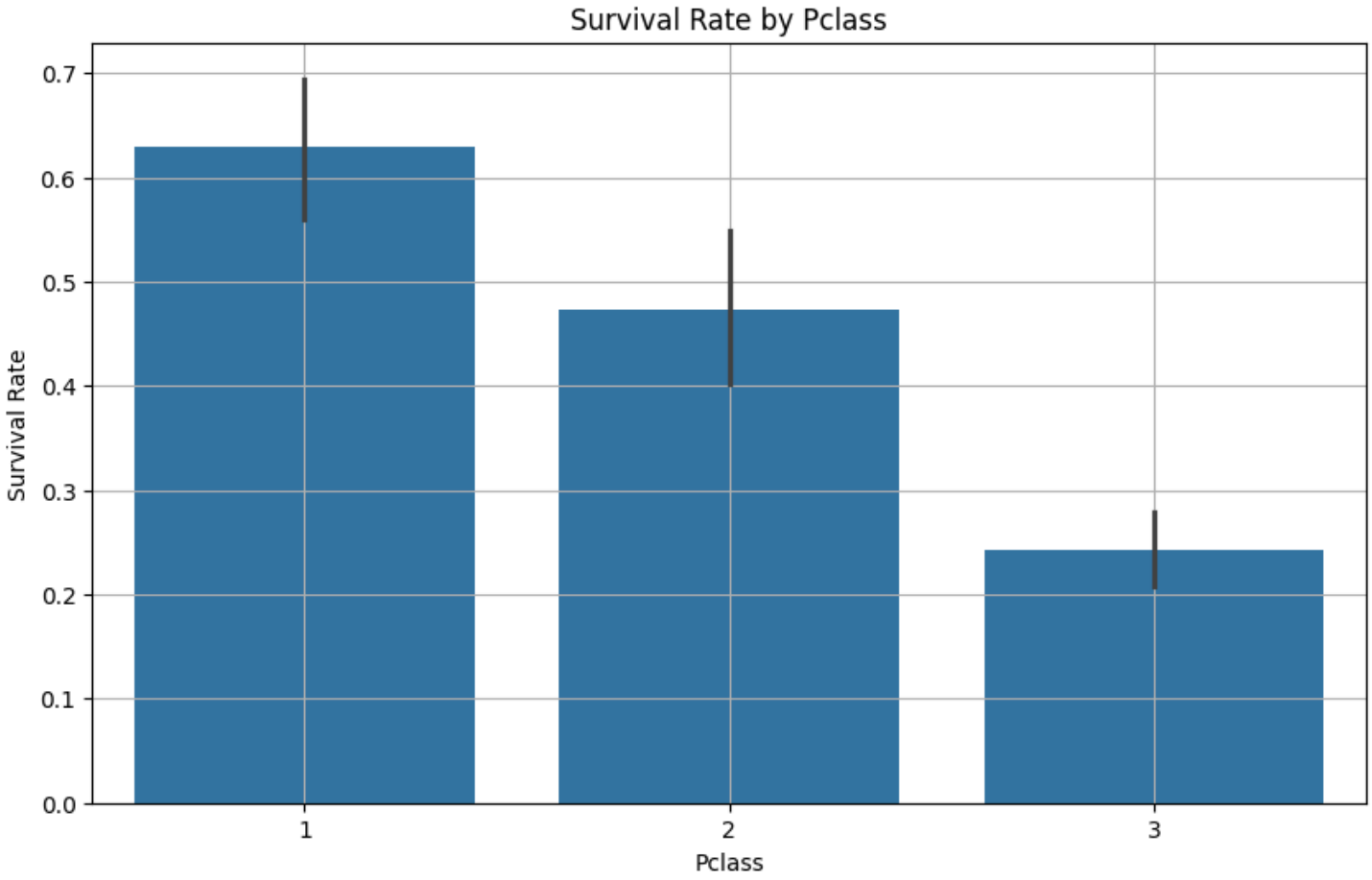
	Survived	Pclass	Sex	Age	SibSp	Parch	Fare	Embarked_Q
0	0	3	0	-0.565736	1	0	-0.502445	False
1	1	1	1	0.663861	1	0	0.786845	False
2	1	3	1	-0.258337	0	0	-0.488854	False
3	1	1	1	0.433312	1	0	0.420730	False
4	0	3	0	0.433312	0	0	-0.486337	False

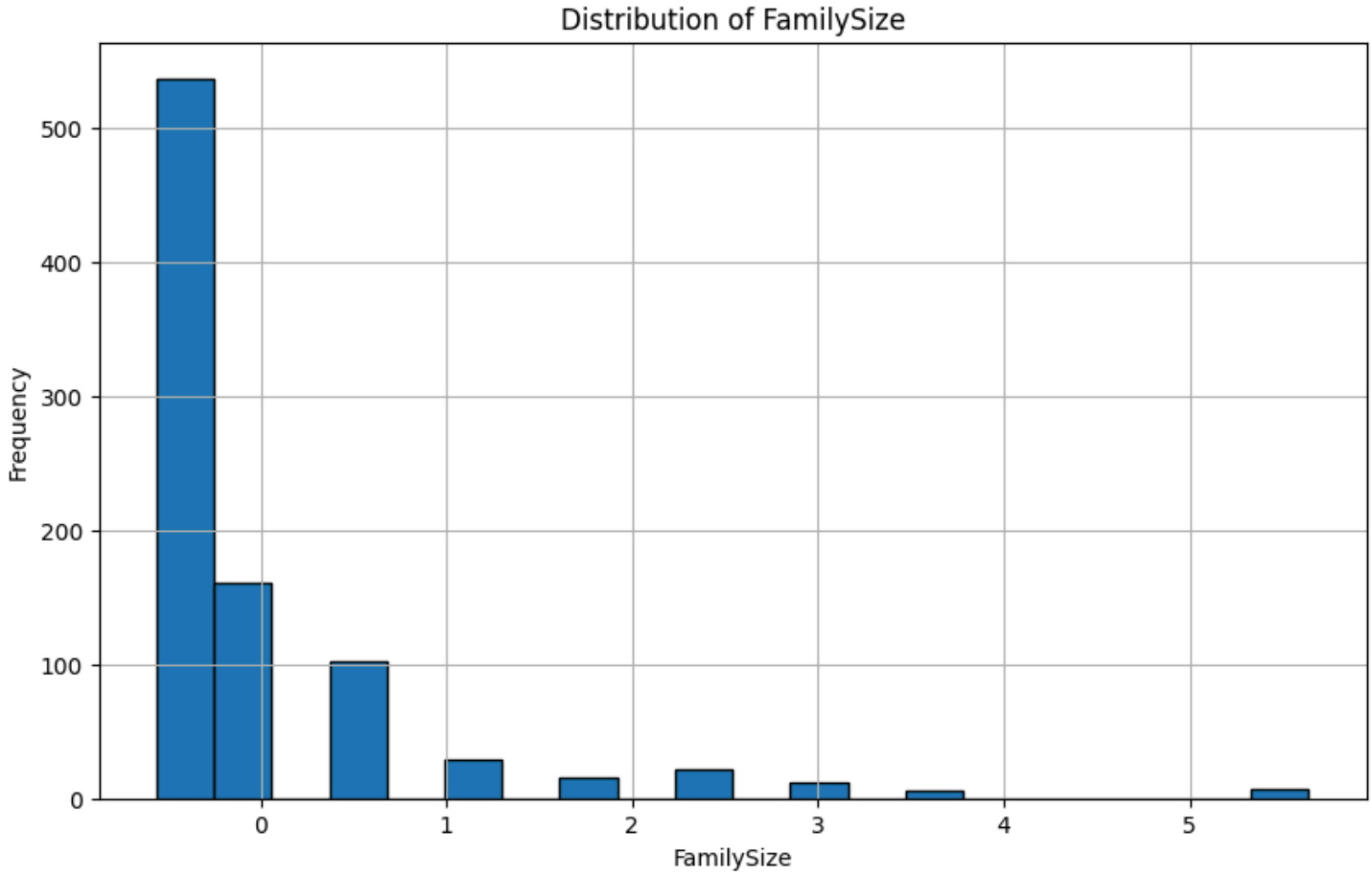
	Embarked_S	FamilySize	Title	AgeBin_Teen	AgeBin_Adult
0	True	0.059160	2	False	True
1	False	0.059160	3	False	False
2	True	-0.560975	1	False	True
3	True	0.059160	3	False	True
4	True	-0.560975	2	False	True

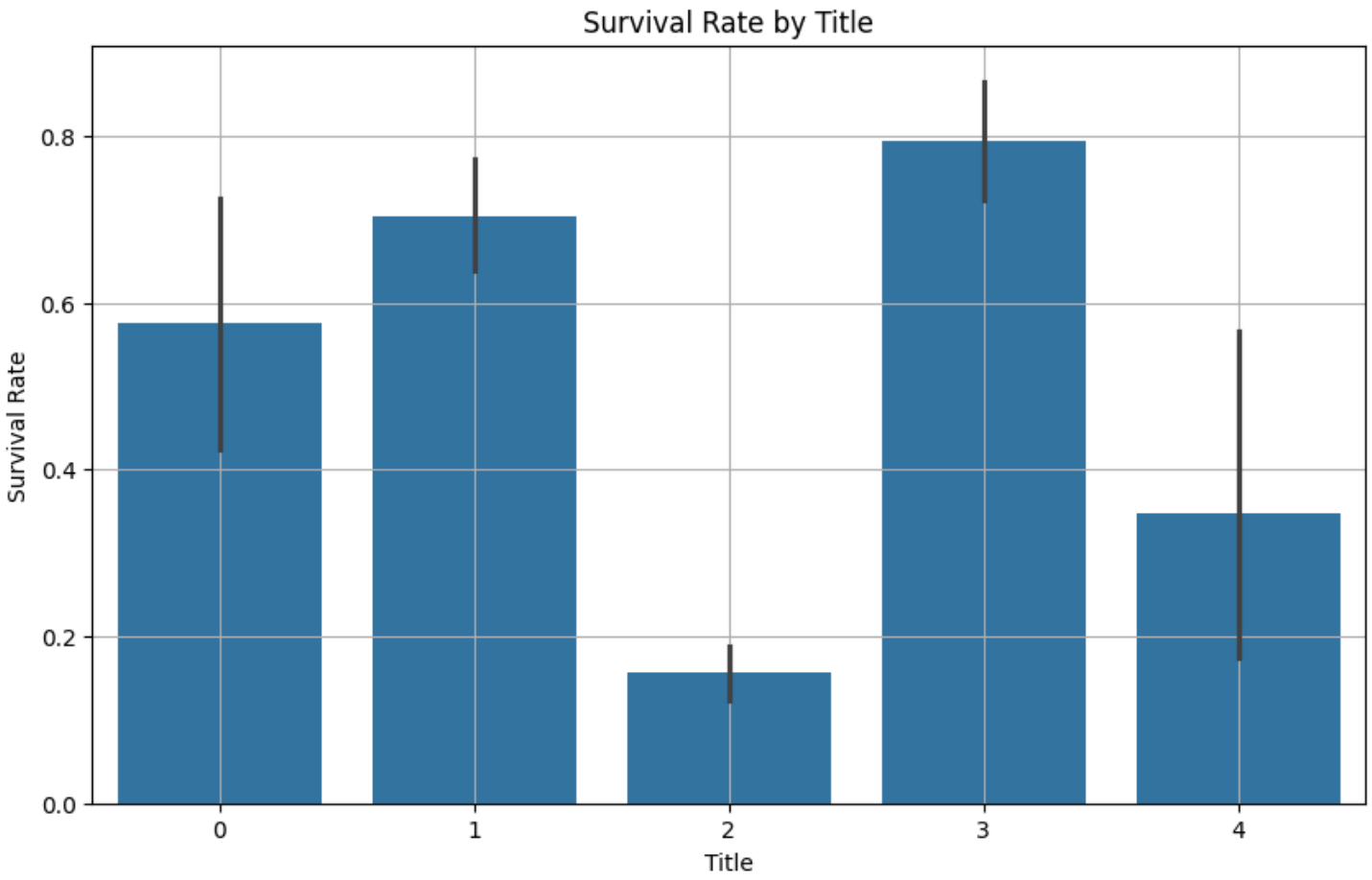
	AgeBin_Middle-Aged	AgeBin_Senior
0	False	False
1	True	False
2	False	False
3	False	False
4	False	False

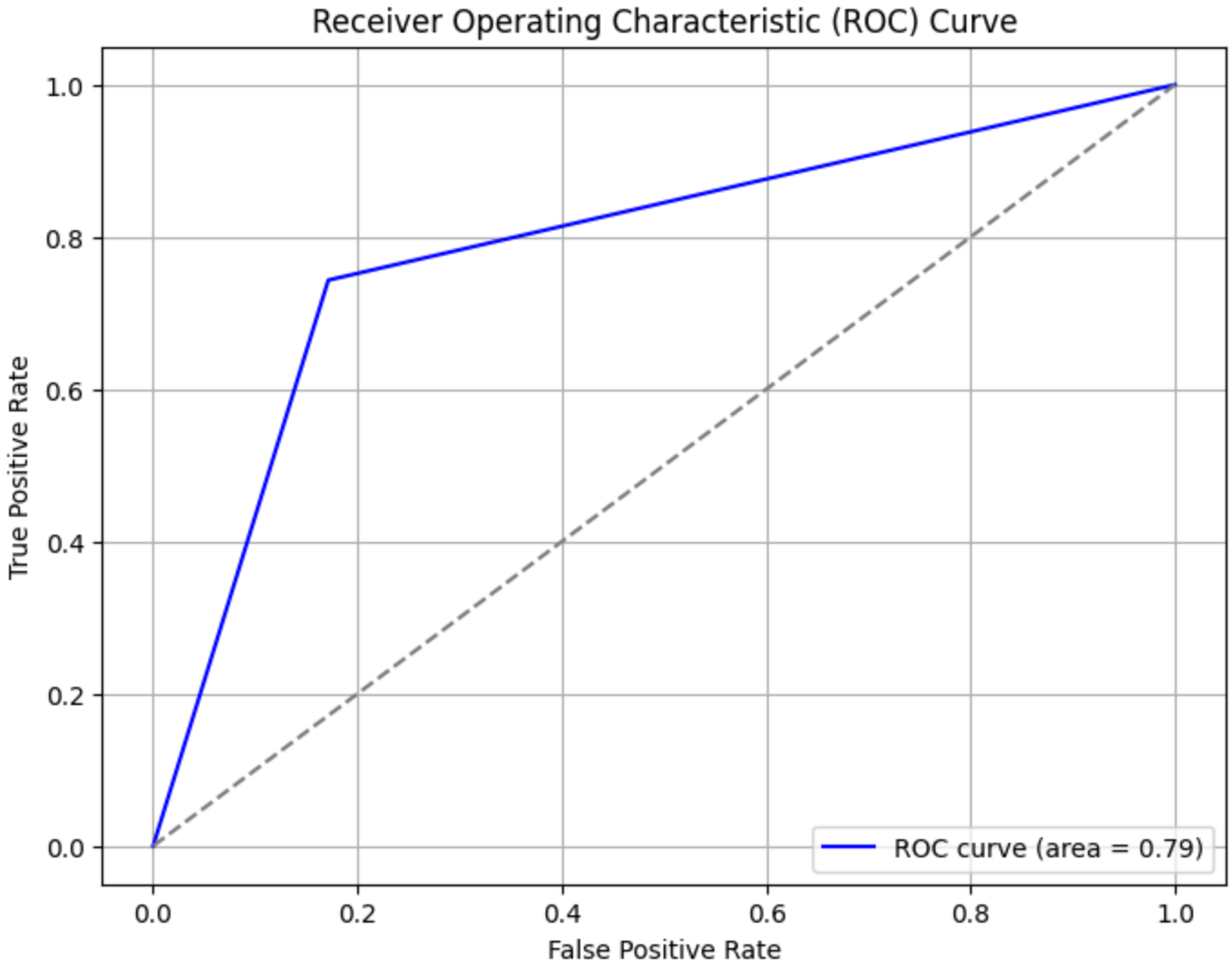



Survival Rate by Sex
Survival Rate
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0
1
Sex (0 = Male, 1 = Female)


Survival Rate by Pclass
Survival Rate
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
Pclass


Distribution of FamilySize
Frequency
FamilySize
0
100
200
300
400
500
0
1
2
3
4
5


Survival Rate by Title
Survival Rate
Title
0.0
0.2
0.4
0.6
0.8
0
1
2
3
4




```
Confusion Matrix:
[[87 18]
 [19 55]]
Accuracy: 0.7933
Precision: 0.7534
Recall: 0.7432
F1 Score: 0.7483
Root Mean Square Error (RMSE): 0.4546
AUC-ROC Score: 0.7859
```