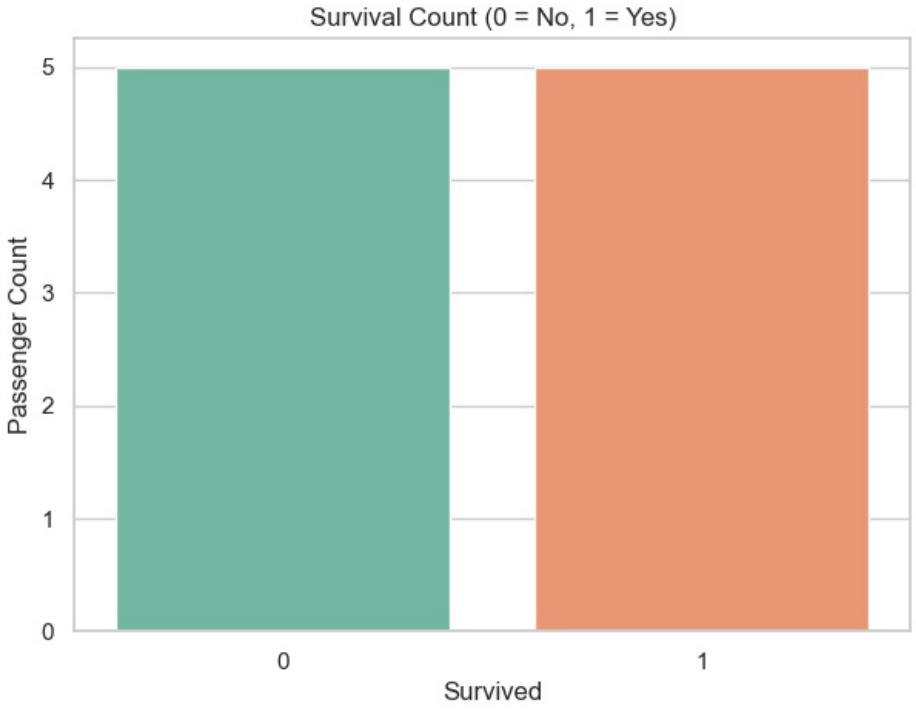
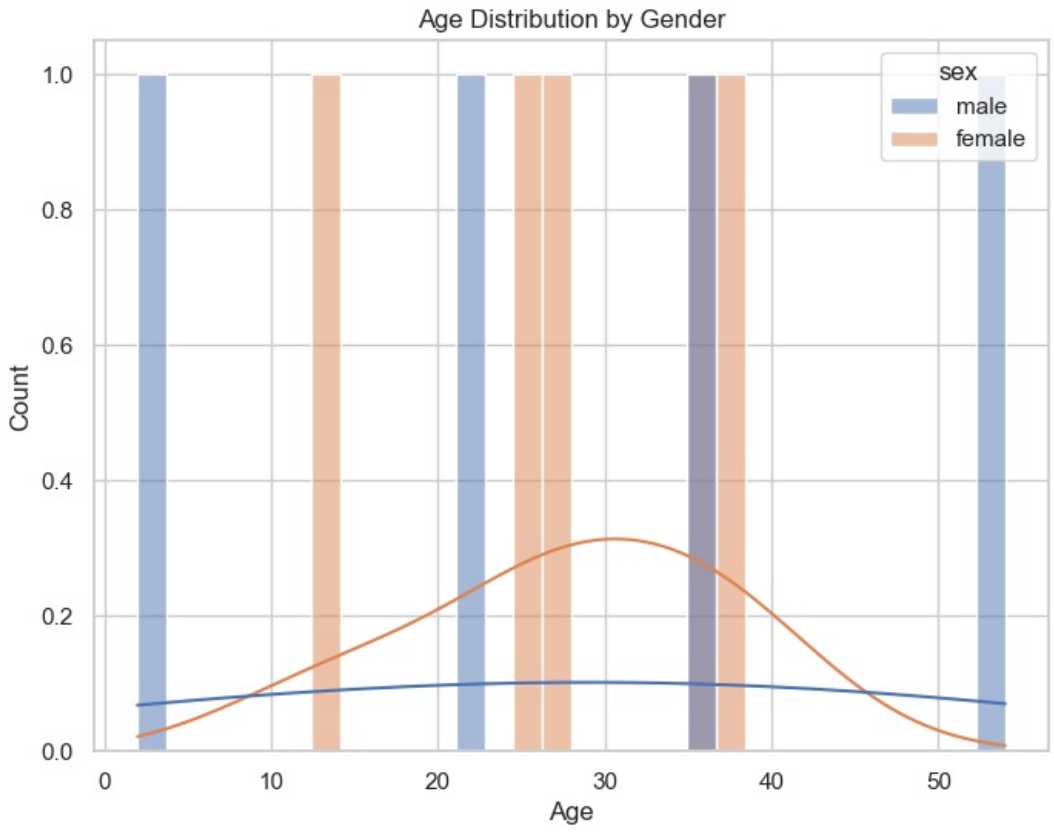
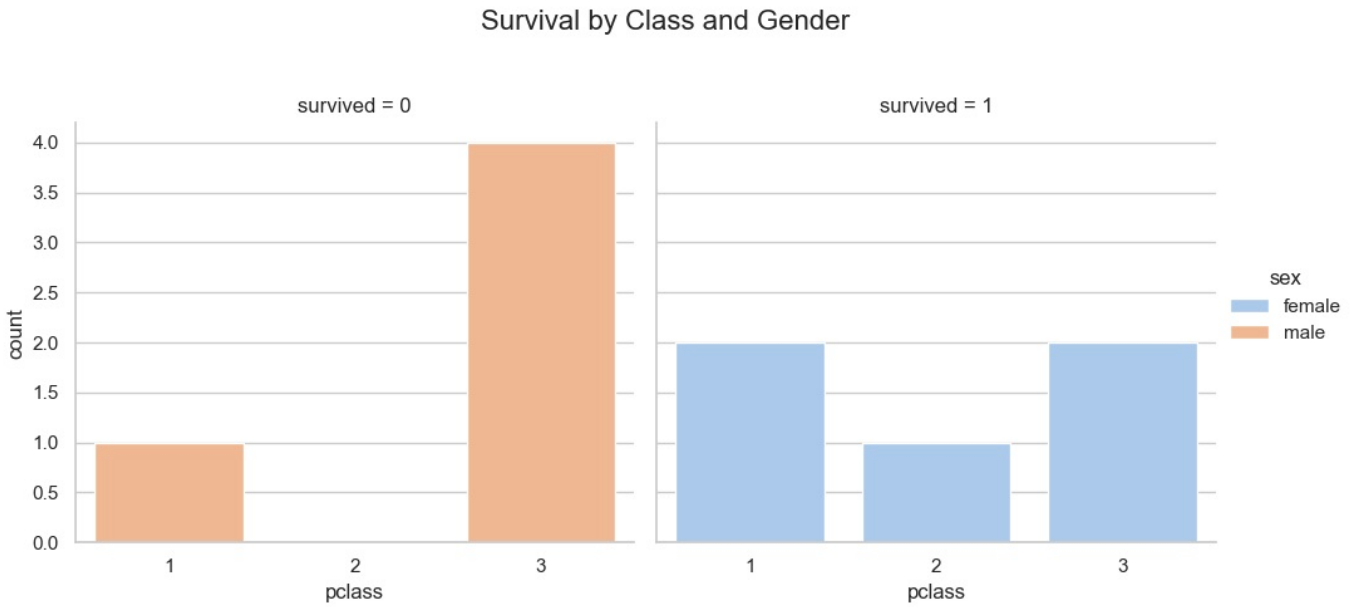
In [6]:
```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

# Load Titanic dataset from your CSV
df = pd.read_csv('titanic_sample.csv')  # <-- now saved to 'df'

# Set Seaborn style
sns.set(style="whitegrid")

# Show basic structure
print(df.head())

# --- VISUALIZATION 1 ---
# Survival Count (Categorical Distribution)
plt.figure(figsize=(7, 5))
sns.countplot(x='survived', palette='Set2', data=df)
plt.title("Survival Count (0 = No, 1 = Yes)")
plt.xlabel("Survived")
plt.ylabel("Passenger Count")
plt.show()

# --- VISUALIZATION 2 ---
# Age Distribution by Gender
plt.figure(figsize=(8, 6))
sns.histplot(data=df, x='age', hue='sex', kde=True, bins=30)
plt.title("Age Distribution by Gender")
plt.xlabel("Age")
plt.ylabel("Count")
plt.show()

# --- VISUALIZATION 3 ---
# Survival by Passenger Class and Gender
# Note: Using catplot as a figure requires it to be assigned
g = sns.catplot(x='pclass', hue='sex', col='survived', data=df, kind='count', palette='pastel')
g.fig.subplots_adjust(top=0.8)
g.fig.suptitle("Survival by Class and Gender", fontsize=16)
plt.show()
```

```
   survived  pclass     sex   age  sibsp  parch     fare embarked  class  \
0         0       3    male  22.0      1      0   7.2500        S  Third
1         1       1  female  38.0      1      0  71.2833        C  First
2         1       3  female  26.0      0      0   7.9250        S  Third
3         1       1  female  35.0      1      0  53.1000        S  First
4         0       3    male  35.0      0      0   8.0500        S  Third

     who  adult_male deck  embark_town alive  alone
0    man        True  NaN  Southampton    no  False
1  woman       False    C    Cherbourg   yes  False
2  woman       False  NaN  Southampton   yes   True
3  woman       False    C  Southampton   yes  False
4    man        True  NaN  Southampton    no   True
```

```
C:\Users\ELCOT\AppData\Local\Temp\ipykernel_12880\2330306851.py:17: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `x` variable
to `hue` and set `legend=False` for the same effect.

  sns.countplot(x='survived', palette='Set2', data=df)
```


Survival Count (0 = No, 1 = Yes)
Passenger Count
0
1
2
3
4
5
0
1
Survived


Age Distribution by Gender
sex
male
female
Count
Age
0.0
0.2
0.4
0.6
0.8
1.0
0
10
20
30
40
50



In [ ]: