```python
import pandas as pd
import plotly.express as px


# Read the dataset
df = pd.read_csv('../data/population_dynamics_clean.csv')


# Normalize the life expectancy column to see clearer changes
# 0.01 is added to avoid a minimum value of 0
df['life_expectancy_norm'] = 0.01 + (df['life_expectancy'] - df['life_expectancy'].min()) /


# Create an animated scatter plot/bubble chart

fig = px.scatter(
    df,
    x = "under5_mortality",
    y = "adolescent_fertility",
    title = "Life Expectancy, Under-5 Mortality, and Adolescent Fertility Rate Over Time",
    size = 'life_expectancy_norm',
    color = 'country',
    color_discrete_map = {
        'Brazil': '#ff7f0e',
        'India': 'green',
        'Kenya': 'red',
        'United Kingdom': '#9467bd',
        'Afghanistan': '#1f77b4'
    },
    hover_name = 'country',
    size_max = 60,
    animation_frame = 'year',
    animation_group ='country',
    labels={
        "under5_mortality": "Under-5 Mortality Rate",
        "adolescent_fertility": "Adolescent Fertility Rate",
        "life_expectancy_norm": "Life Expectancy (Normalized)"
    }
)

fig.show()
```

Unable to display output for mime type(s): application/vnd.plotly.v1+json