The bar graph shows the differences among age groups on the Implicit Association Test that measures levels of racial prejudice. Higher scores indicate stronger bias.

**Measuring Racial Prejudice, by Age**

- **Key:**
  - <15: little or no bias
  - 15–35: slight bias
  - 35–65: moderate bias

**Score on the Implicit Association Test**

- **Age Range:** Below 18, 18–24, 25–34, 35–44, 45–54, 55–64, 65+

**Political Identification**

- **Groups:** Group 1, Group 2, Group 3, Group 4, Group 5, Group 6, Group 7

**Key:**
- <15: little or no bias
- 15–35: slight bias
- 35–65: moderate bias

Source: The Race Implicit Association Test on the Project Implicit Demonstration Website

**a. The data can be described by the following polynomial model of degree 3:**

\[
S = -0.02x^3 + 0.4x^2 + 1.2x + 22 + (-0.01x^3 - 0.2x^2 + 1.1x + \ldots)
\]