Doing the Splits: Demographic Breakouts for ARCC 2010

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Advisory Note

- The materials in this session are not available for distribution given the preliminary nature of the work completed.

- In coming weeks, we will apprise institutional researchers and stakeholders of forthcoming data products.

Session Objectives

- Introduce CCC researchers and officials to a new dimension of the Chancellor's Office accountability data system (ARCC) for planning

- Obtain feedback on ways to improve the sharing and analysis of demographic breakouts

- Enable us to develop a useful data product for institutional research and policy making

Background

- Accountability Reporting for the Community Colleges (ARCC) & AB 1417 (passed in 2004)

- Focus on Results; Basic Skills Improvement Accountability; and Career Development and College Preparation

- Emerging demands on planning and data: the gap in demographic analyses

Gaps in Demographic Analyses in ARCC

- Sparse reporting of performance indicators by demographic groups in *Focus on Results:* A resource issue
  - Size of *Focus on Results*
  - Workload & Schedule
  - Level of Demand for Additional Analyses

Demand for Demographic Analyses of ARCC Performance Indicators

- Oversight bodies
- Think tanks and academic researchers
- Institutional researchers in the CCC's
- Media
- Legislators
- Students and other special interest groups

Obvious Questions Our Data May Answer

1. Across the CCC system, do measures of student outcomes vary by demographic group?

2. Do ARCC outcomes at different colleges vary substantially by demographic groups?

3. Do different demographic groups show different levels of success on the different types of outcome at my college?

A Question We Don't Answer

- Has this college performed much worse on a performance indicator with group X than this college has done with other groups?

  Note: Without controlling for pre-existing differences among the students in the groups compared, an answer with only the reported data is not feasible.

A Second Kind of Question We Don't Answer

- For example, has this college performed much worse on a performance indicator with Latino students than other colleges have done on this indicator with Latino students?

  Note: Again, without controlling for pre-existing differences among the students in the groups compared, an answer with only the reported data is not feasible.

Caveats to Our Data

- Demographic data---a highly charged topic
- Such data do not speak for themselves
- Format of presentation---Issues with small n's
- Not longitudinal (so nothing about trends)
- Effect of decline to state and/or misreporting
- Prior to major data improvement in the CB 21 recoding project
- Use of 2010 ARCC data (not 2011 ARCC)

Data Suppression Objectives

- Preserve confidentiality

- Focus results on categories with a large enough volume to affect institutional-level results

- Help prevent misinterpretation and misuse of highly volatile pieces of data (those with small counts)

Possible Suppression Rules

- Suppress the data when the cell count < xx.

- Suppress the data when the cell count is less than yy percent of the total population.

- Collapse (combine) categories where this is effective.

System Performance

- Demographic splits by race/ethnicity; gender; and age group

- Performance indicators of Student Progress and Achievement (SPAR); Persistence; 30-unit threshold; Basic Skills Improvement; ESL Improvement, and participation rates.
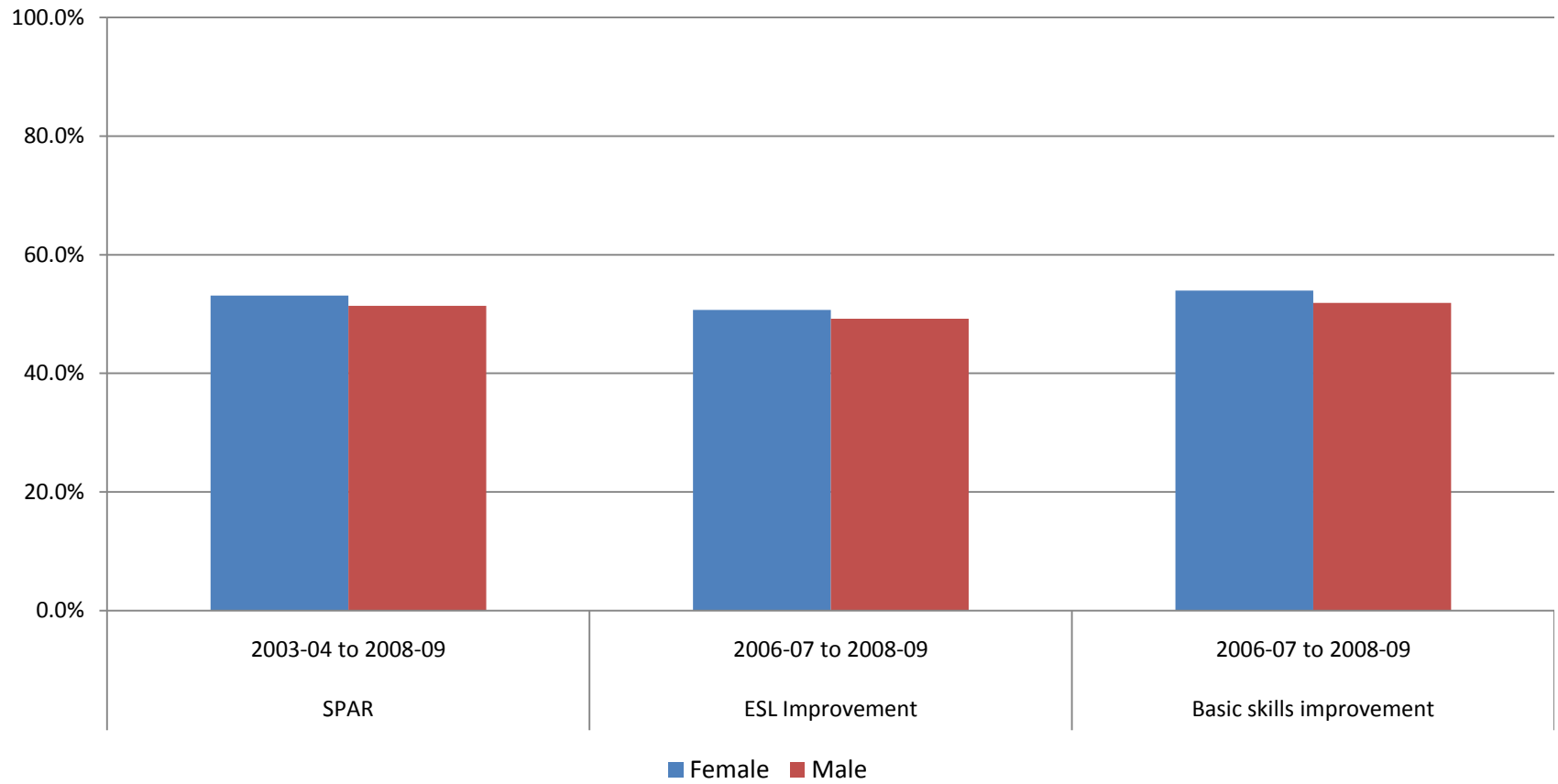
System Performance

**Demographic Distributions of Selected Statewide Indicators by Race/Ethnicity**

Legend:
- ■ SPAR 2003-04 to 2008-09
- ■ ESL Improvement 2006-07 to 2008-09
- ■ Basic skills improvement 2006-07 to 2008-09
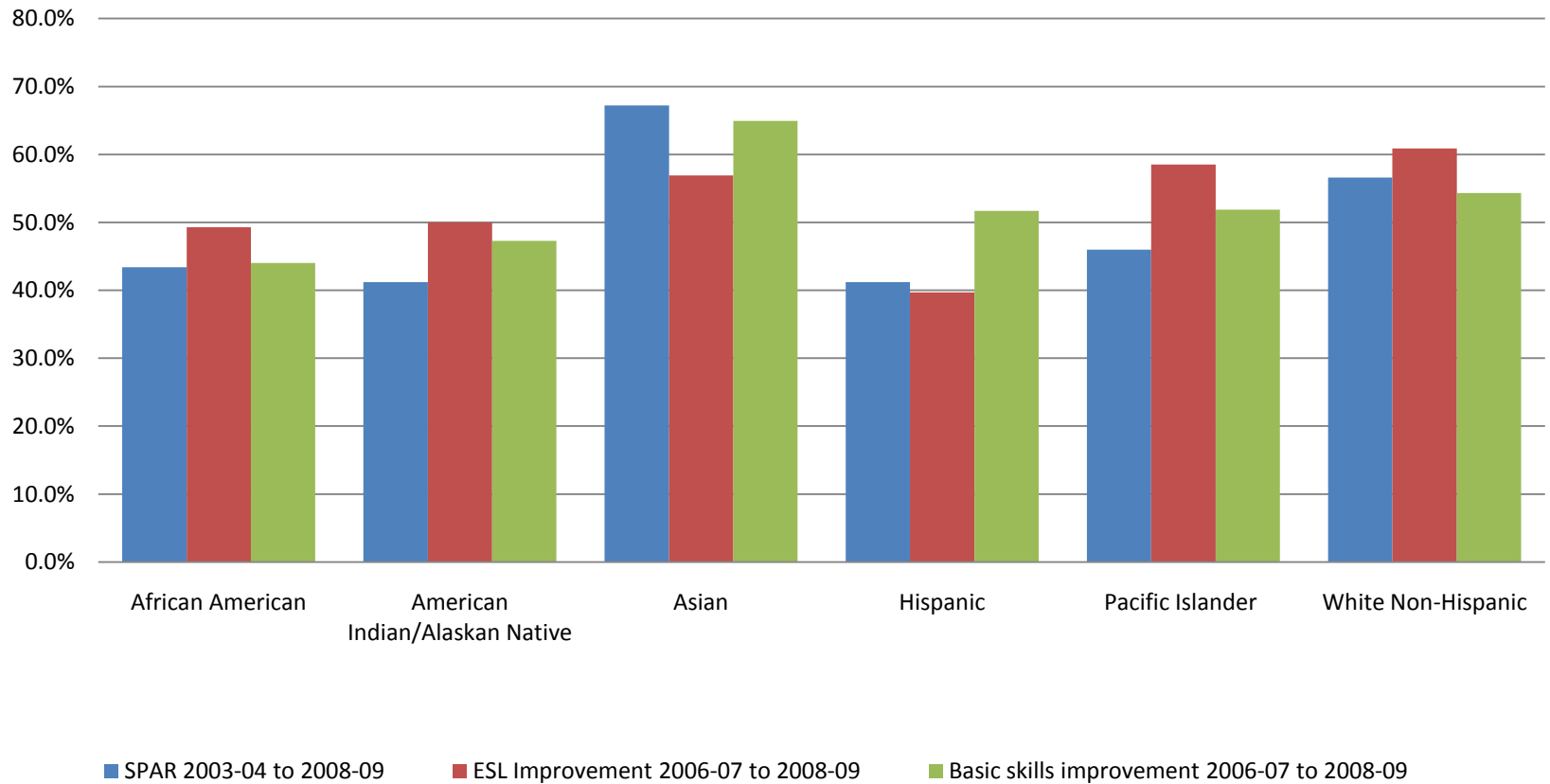
System Performance

Demographic Distributions of Selected Statewide Indicators by Gender

System Performance

Demographic Distributions of Selected Statewide Indicators by Age Groups

Legend: SPAR 2003-04 to 2008-09, ESL Improvement 2006-07 to 2008-09, Basic skills improvement 2006-07 to 2008-09
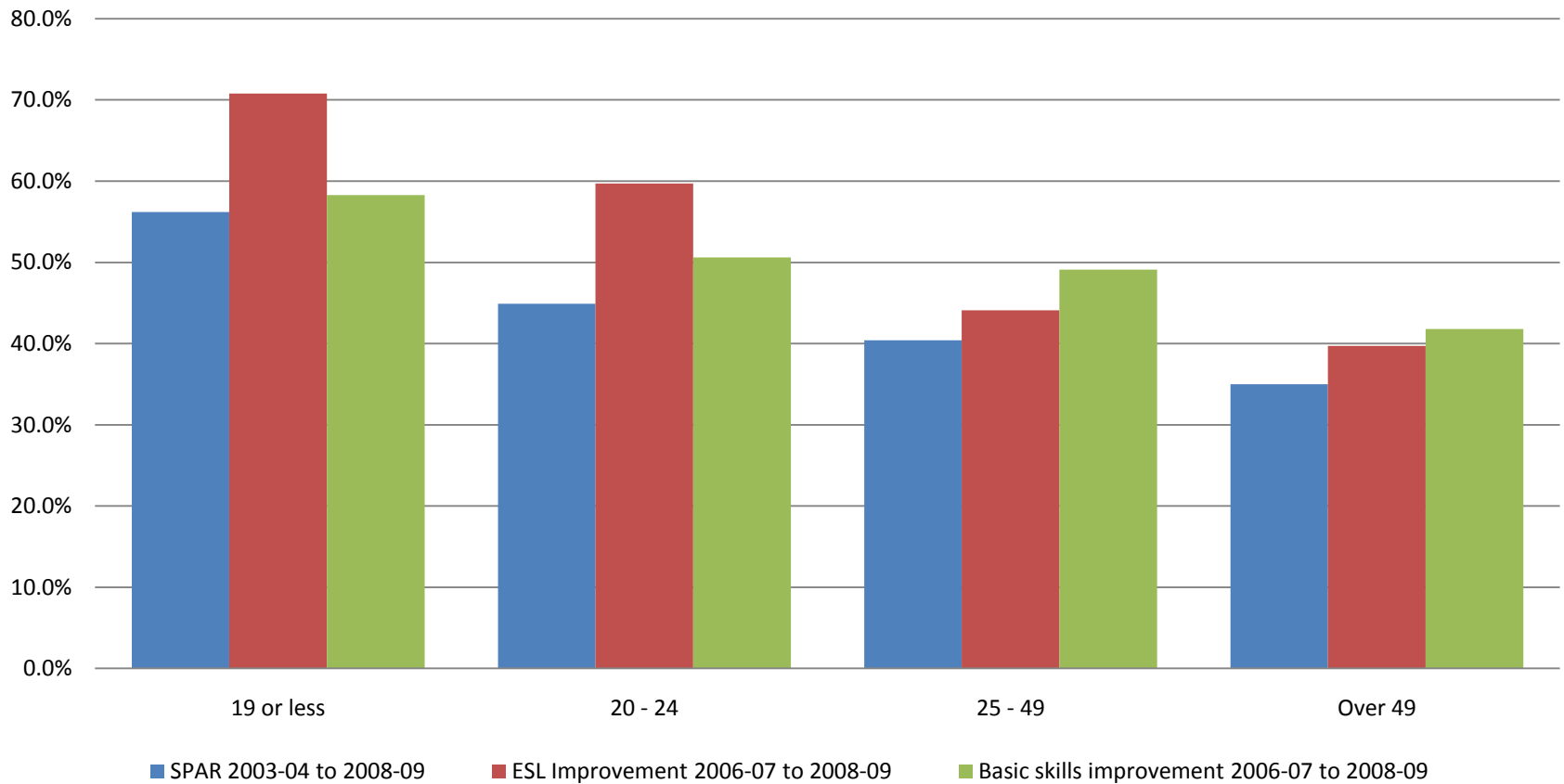
Between-College Variation

- Suppression of categories with n< ?
- Box-plots, including outlying cases

More on College-level Performance

- Demographic splits by race/ethnicity; gender; and age group

- Performance indicators of Student Progress and Achievement (SPAR); Persistence; 30-unit threshold; Basic Skills Improvement; and ESL Improvement.

Notes on Graphs (box plots)

- Box plots work well for comparing distributions across a categorical variable such as race/ethnicity (but some other type of graph may work better for lay audiences).

- The following figures use a new ID code to represent each institution, ranking each one by number of enrolled students, going from low to high.
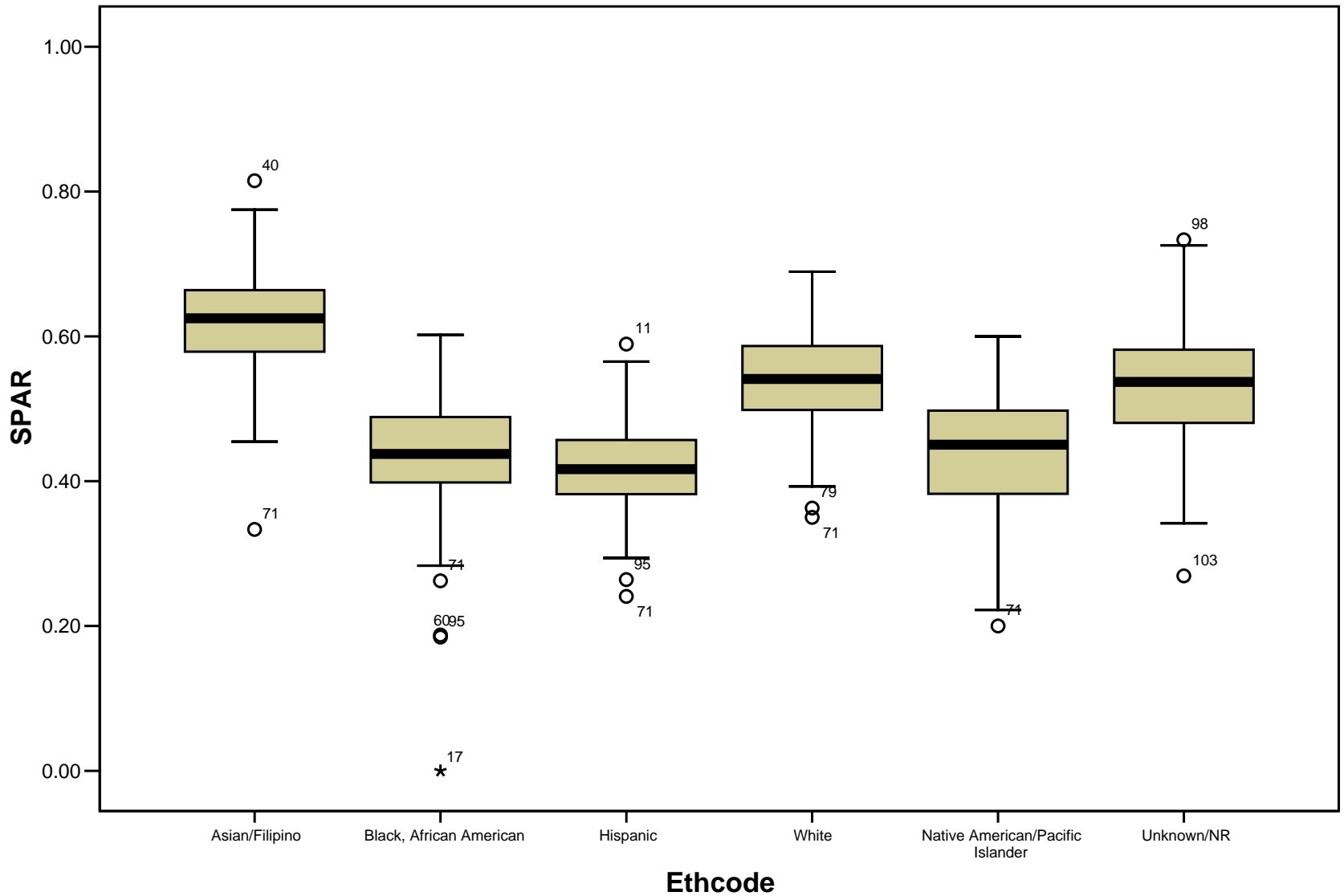
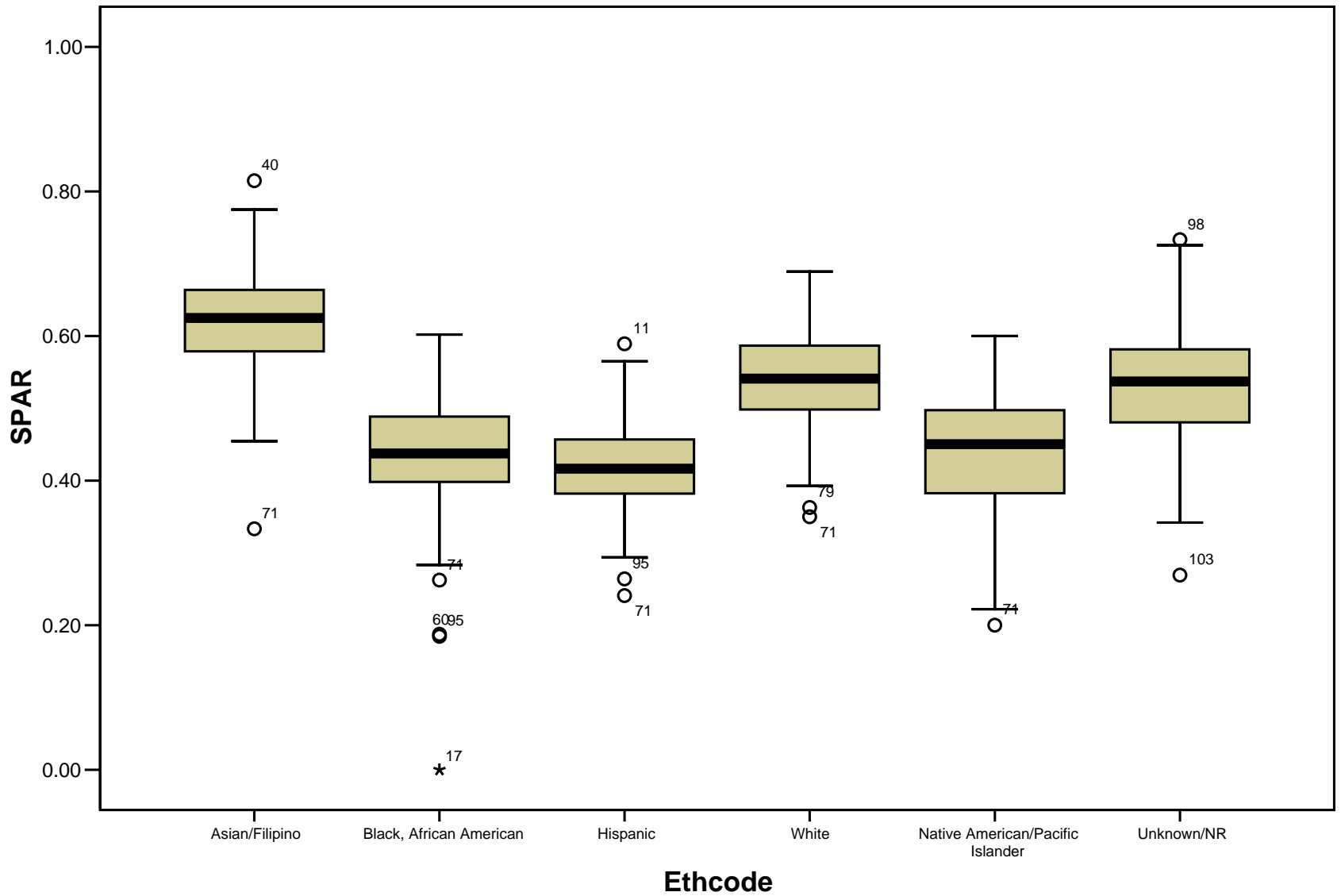# ESL Improvement by Race/Ethnicity (All Cases)
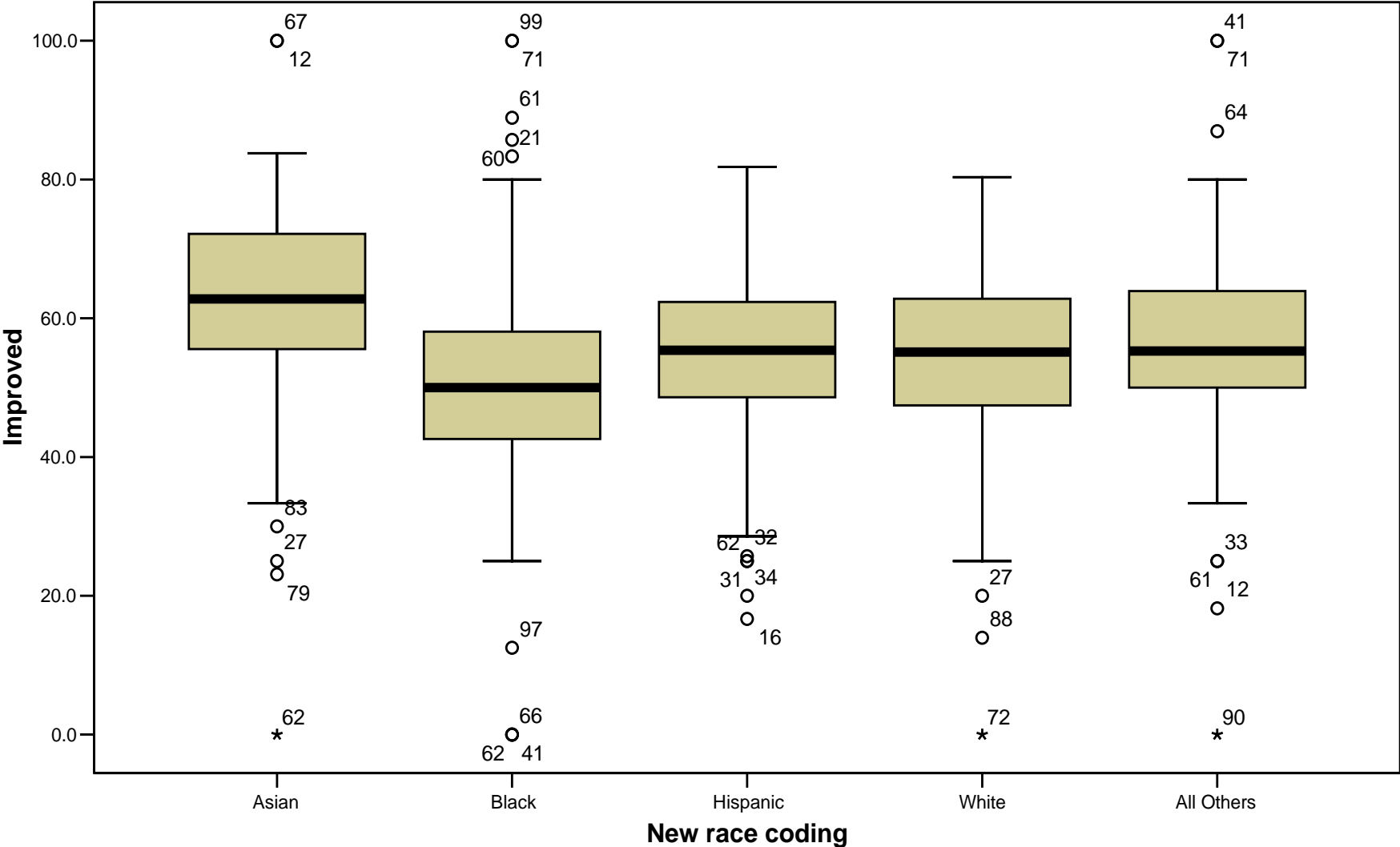
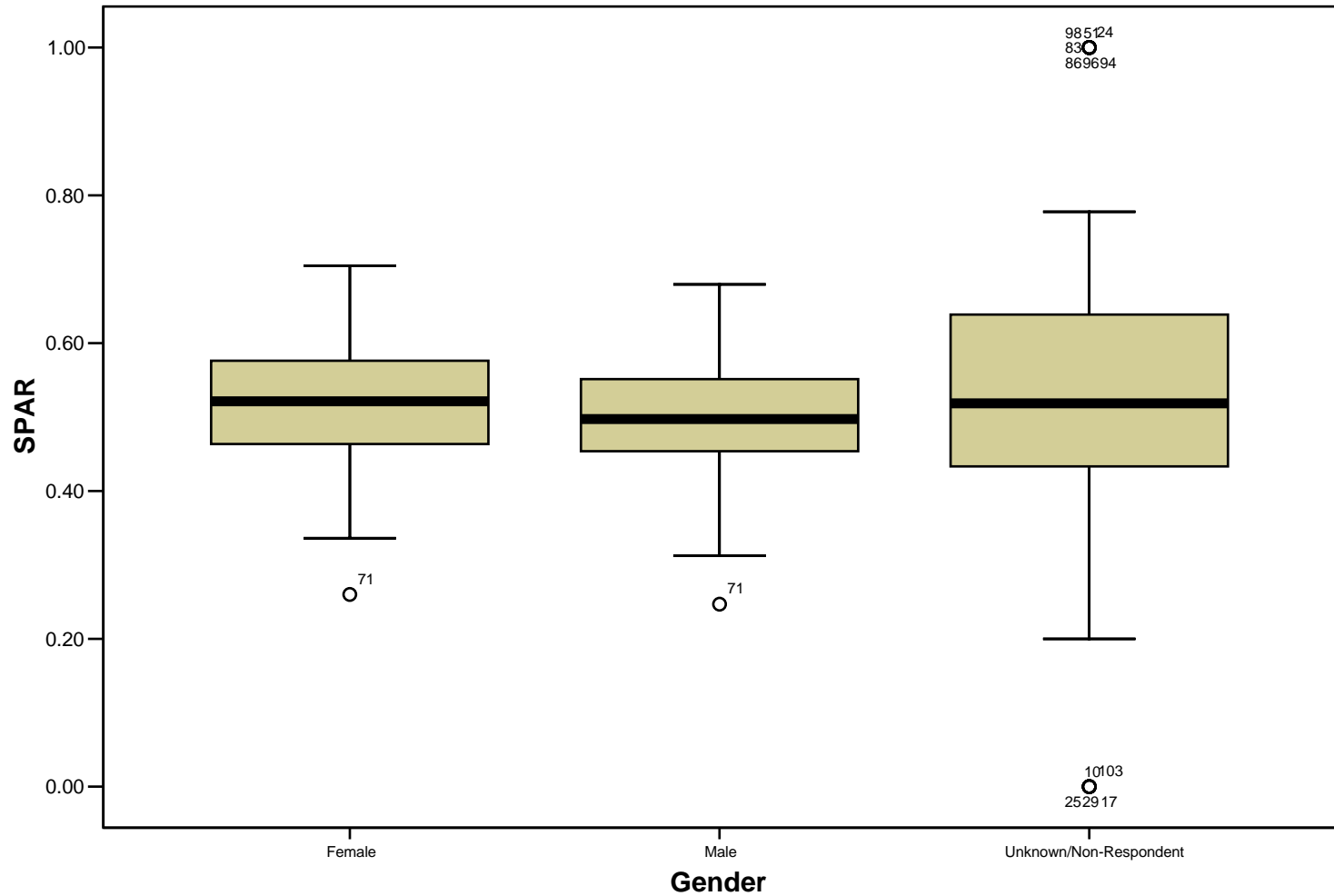# ESL Improvement by Race/Ethnicity (n>=5)
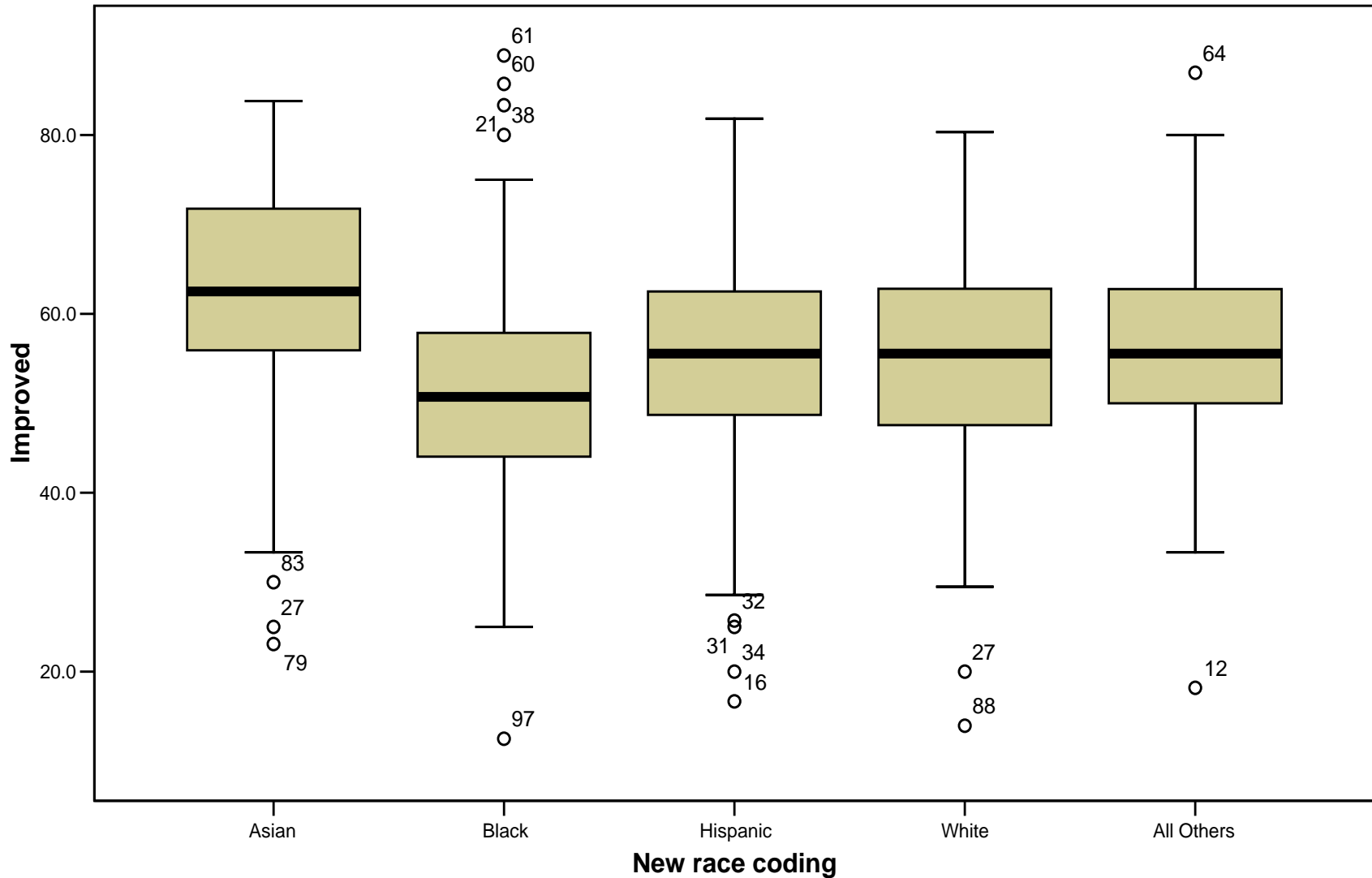
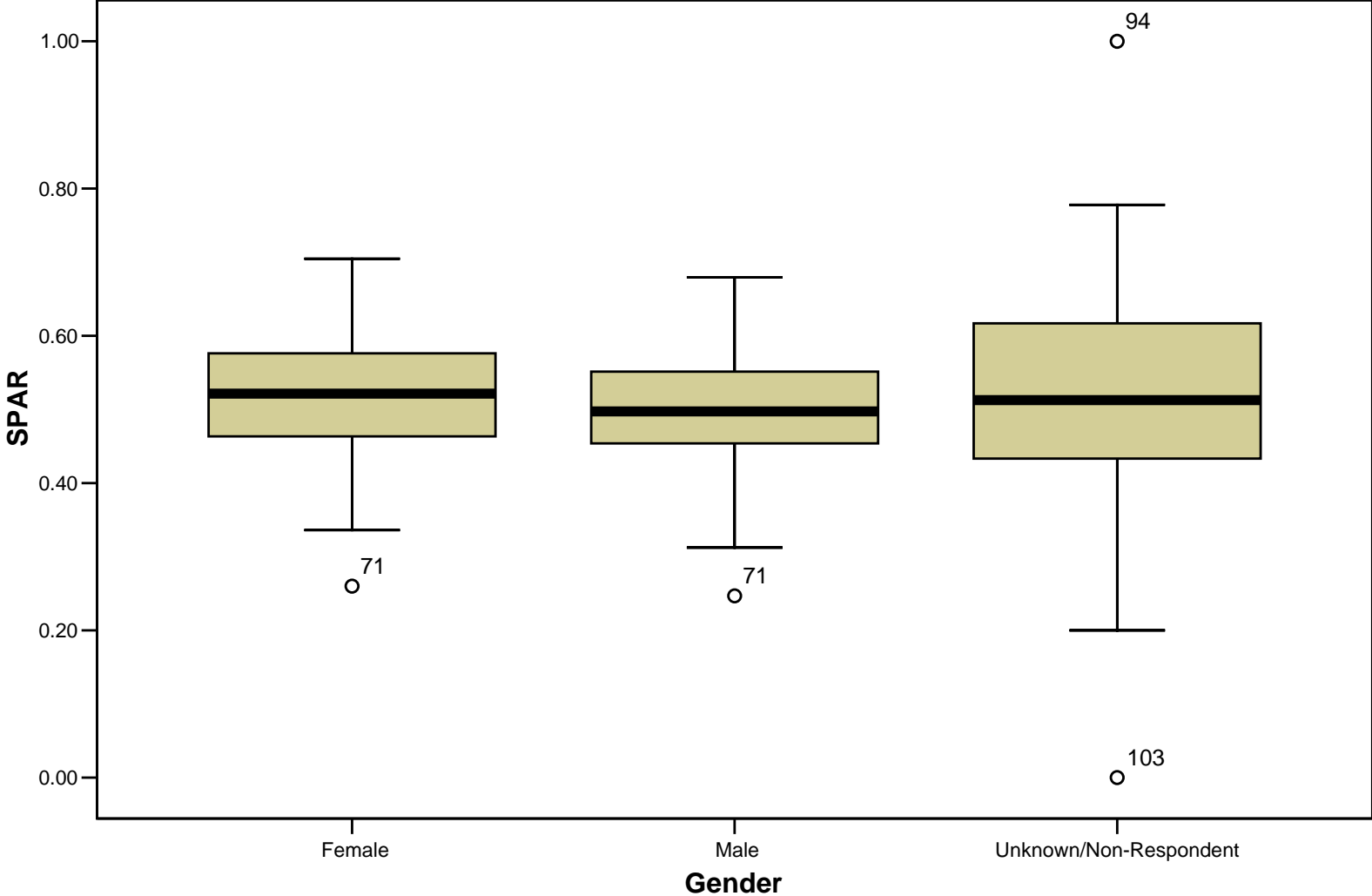# SPAR by Race/ethnicity (all cases)

SPAR by Race/ethnicity (n>=5)

SPAR by Gender (all cases)

SPAR by Gender (n>=5)

Within-College Variation

- Even if your institution fares relatively well in comparison to other institutions, does any gap appear between demographic groups within your institution?

- If a gap appears, can you explain the nature of such a gap (implying also potential remedies)?

Implications

- Each CCC researcher should carefully examine these data for his/her college(s) or district.

- Share the data and your insights about them with your colleagues on campus.

- Assess the impact of such data. Consider multiple scenarios.

- Maybe begin or plan analyses that explore the factors that contribute to (or explain) apparent variations on your campus if any exist.

What's Next

- Our consideration of input from stakeholders

- Possible webinar for pre-release info

- Timing of data releases

- Format of data releases

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We thank you for your participation today.

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