

San Jose State University

From the Selected Works of Emily K. Chan

2013

Reading the tides: Identifying the disparities between student confidence and information literacy competence

Valeria E. Molteni, *San Jose State University*

Emily K Chan, *San Jose State University*



Available at: https://works.bepress.com/emily_chan/32/

Reading the Tides: Identifying the Disparities between Student Confidence and Information Literacy Competence



Valeria E. Molteni and Emily K. Chan
 Academic Liaison Librarians, Dr. Martin Luther King, Jr. Library
 San José State University, San José, California

Abstract

Developing information literacy skills in undergraduate students is an ongoing and dynamic process. Awareness of student backgrounds is a major factor that can influence instructional techniques and pedagogy. With this in mind, a research project was developed to better understand a student population. During Fall 2012, a convenience sample of undergraduate Health Professions students were surveyed during library instructional sessions. Demographic information, confidence in performing information literacy-related tasks, and mastery of information literacy questions were collected.

This poster will highlight the differences between students' self-reported mastery levels and their actual quiz results. Which demographic elements are correlated with students' levels of self-confidence? Does the sample reflect a population with unproven/unrealistic expectations regarding information literacy skills? Taking these aspects into account, how can librarians modify information literacy sessions to address these gaps? What are possible implications for medical and health science librarians who will support these individuals once they become professionals and enter the health sciences fields?

With a sample population of 239 surveyed undergraduate Health Professions students, this study will offer some insight and information about future health professionals and their needs and gaps in information competency. It is imperative that medical, health science, and clinical librarians understand some of the underlying assumptions that their users may bring with respect to their information competency skills.

SJSU: HPRF100W

- Health Professions 100 Writing
 - Mandatory writing course for the area of Health Sciences
 - Promotes the development of research skills
 - Exposes students to the resources that are specific to the health sciences
 - First opportunity to link health care literature to clinical practice

The Role of Confidence in the Learning Process

- Proficiency and overconfidence
 - Connections between student self-rates and how they actually perform
 - Overconfidence in skills could result in students not paying attention to the library instructional sessions
 - These are potential factors that could influence students' receptiveness to the content that is being delivered

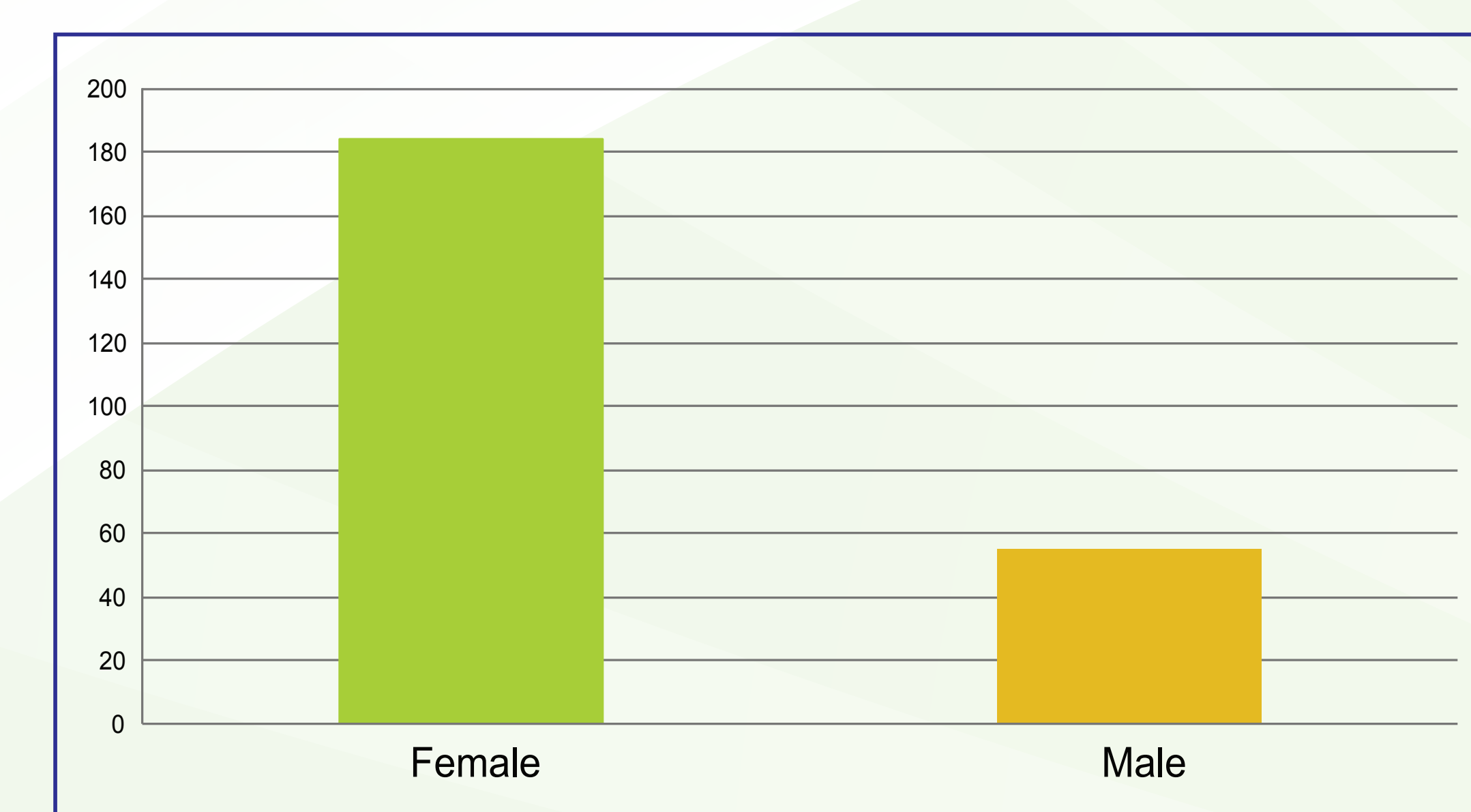
Goals of the Research

- Identify the demographic distribution of the students who are taking HPRF100W
- Identify students' confidence levels for engaging in the research process
- Observe the possible differences between students' skill perceptions and performance in answering specific information literacy questions
- Make recommendations for modifying HPRF100W information literacy lesson plans based on the study's observations

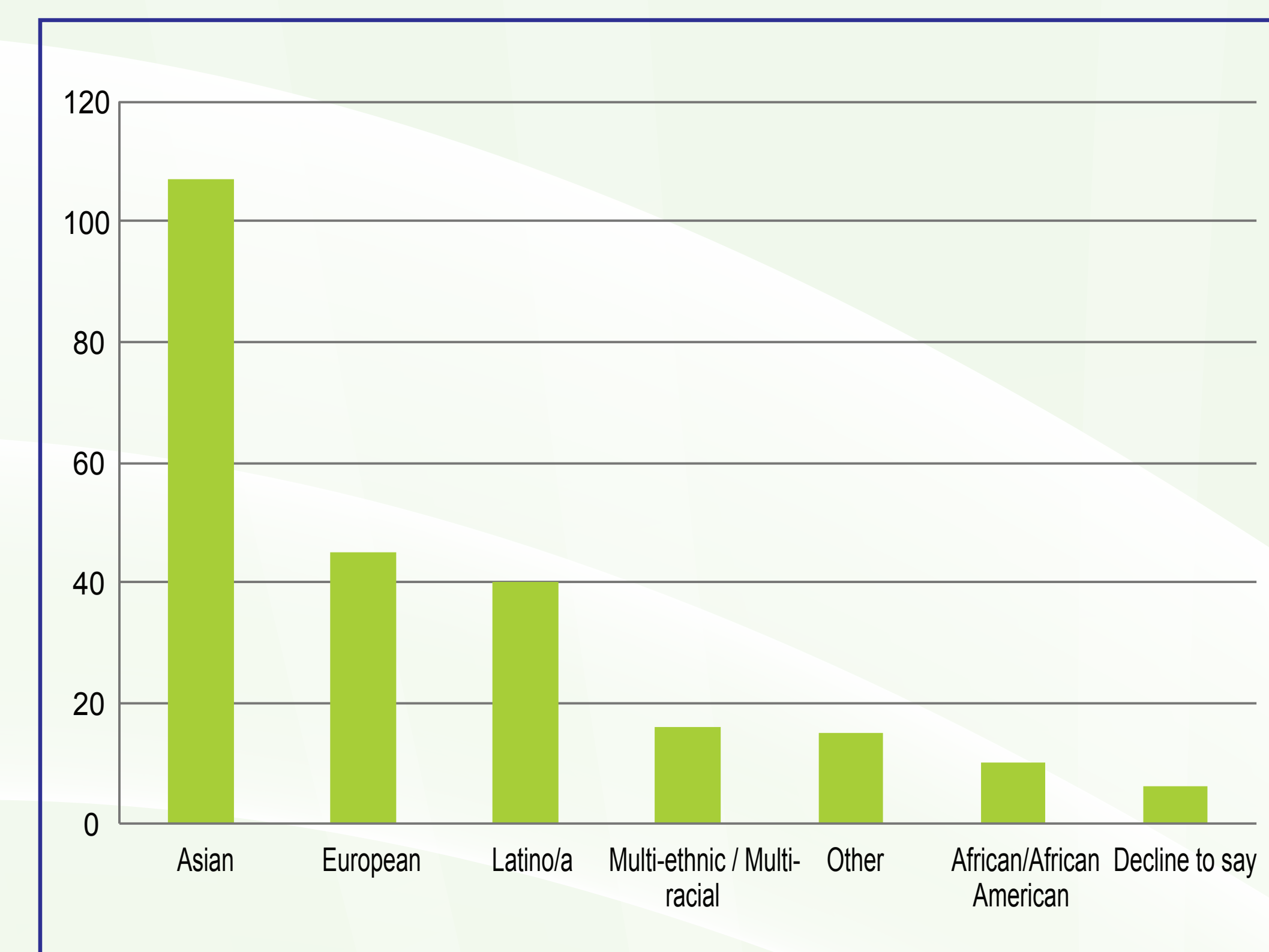
Research Methodology

- Fall 2012
 - The authors taught 13 of 15 total sessions
- Survey
 - Administered online through the Qualtrics platform at the onset of the information literacy session.
 - Demographics: Students' background, Major(s), minor(s)
 - Information Literacy
 - Students' perceptions of their information literacy skills
 - 7-question information literacy quiz

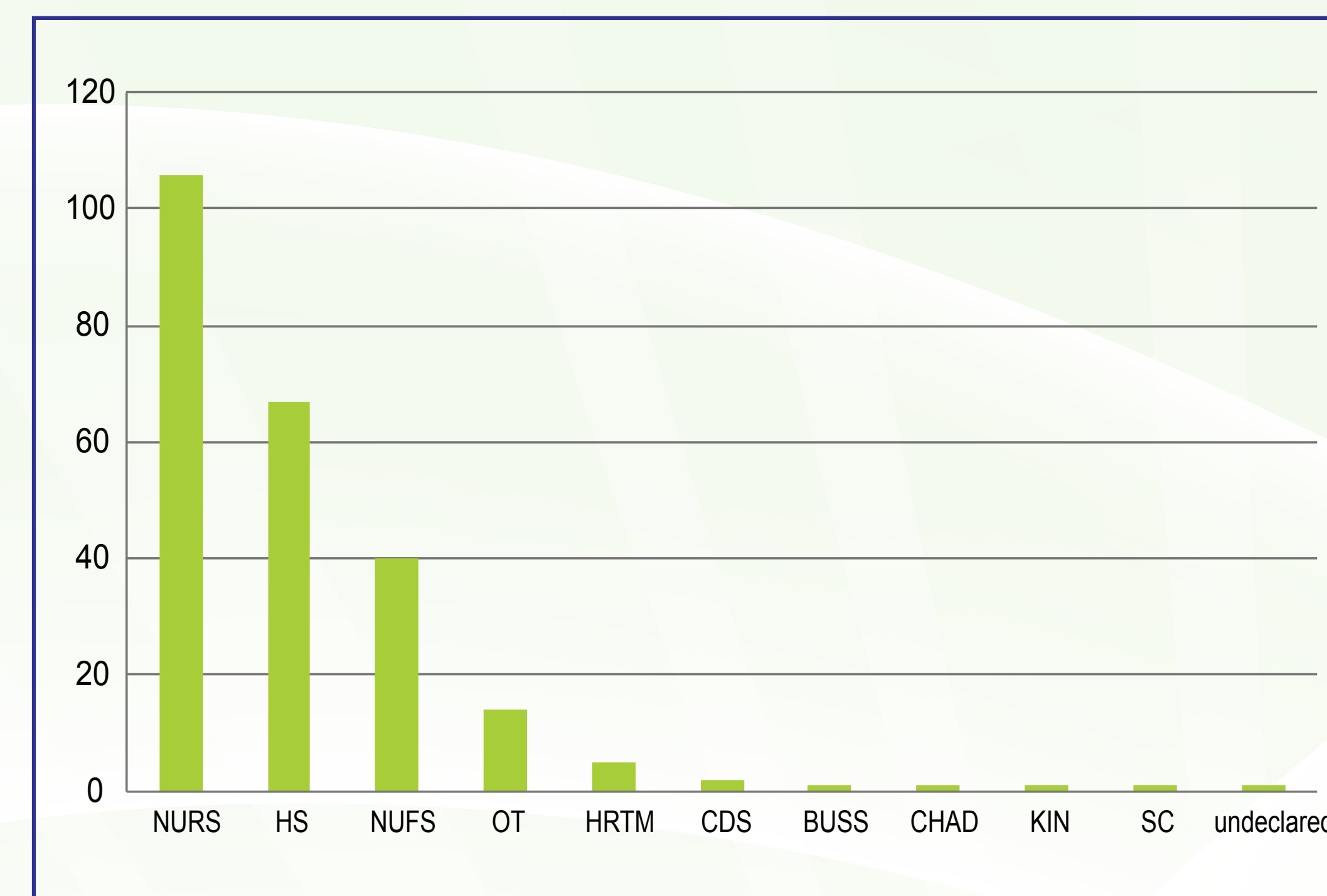
Gender



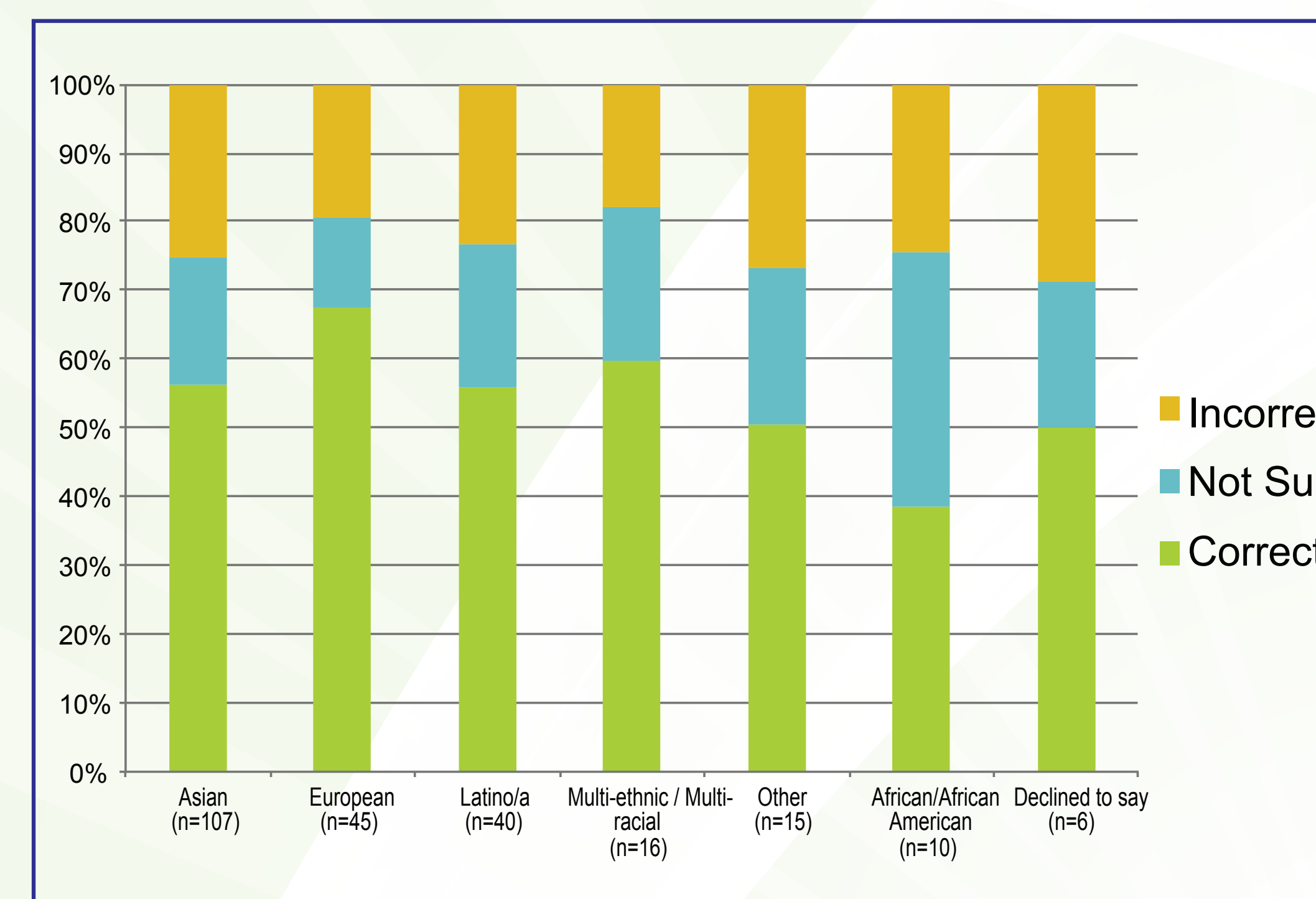
Race/Ethnicity



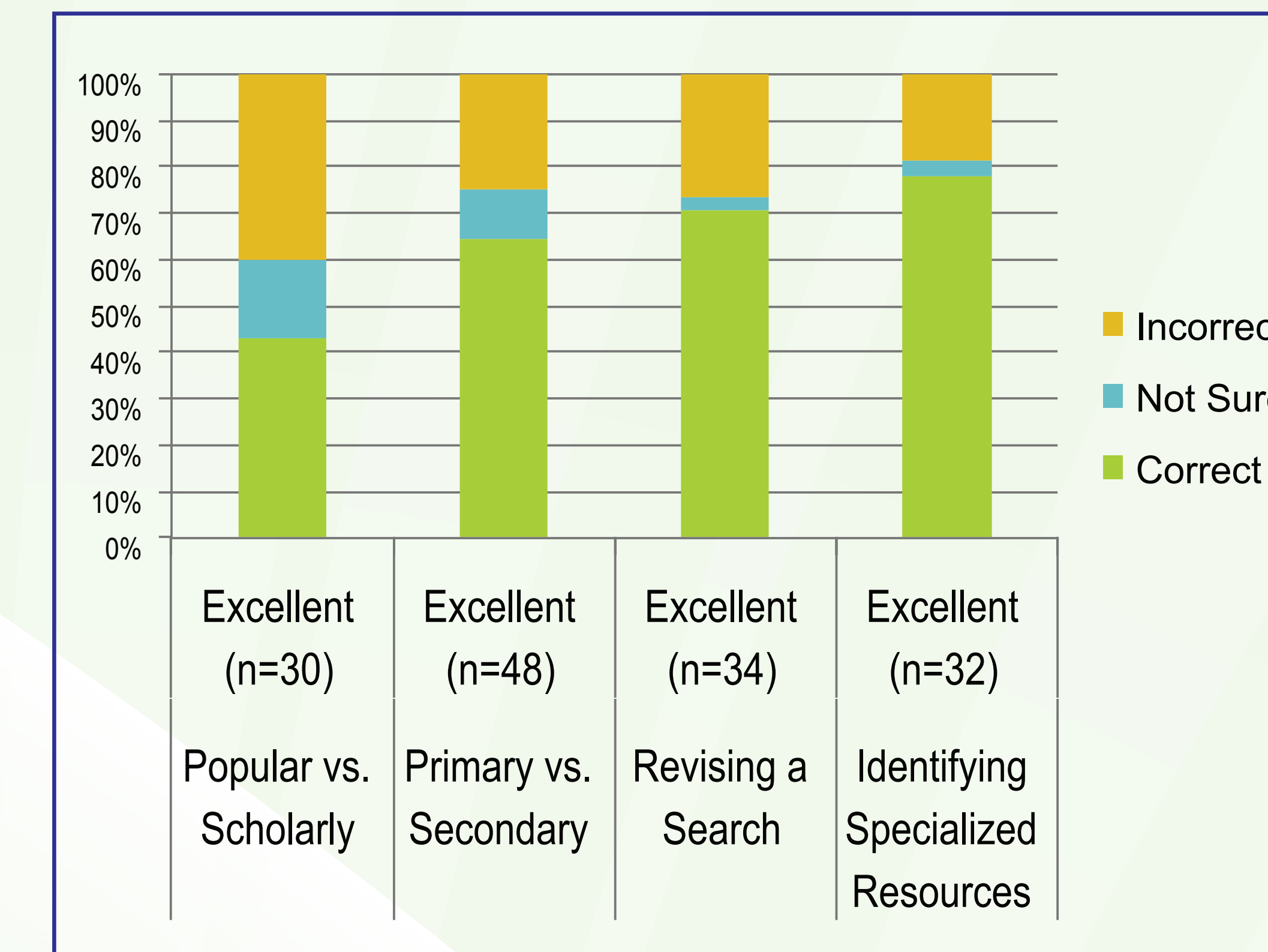
Majors/Departments



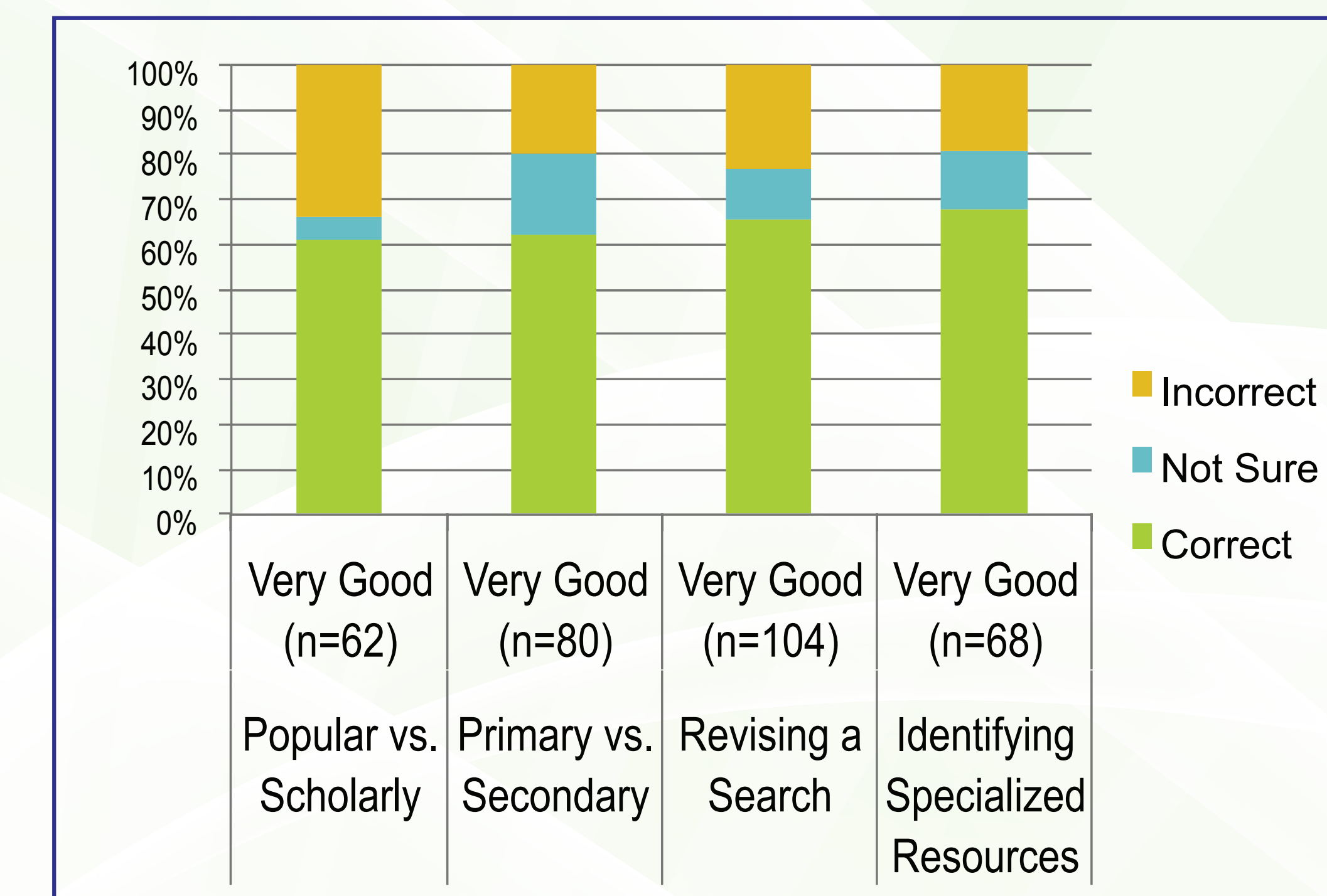
Performance by Race/Ethnicity



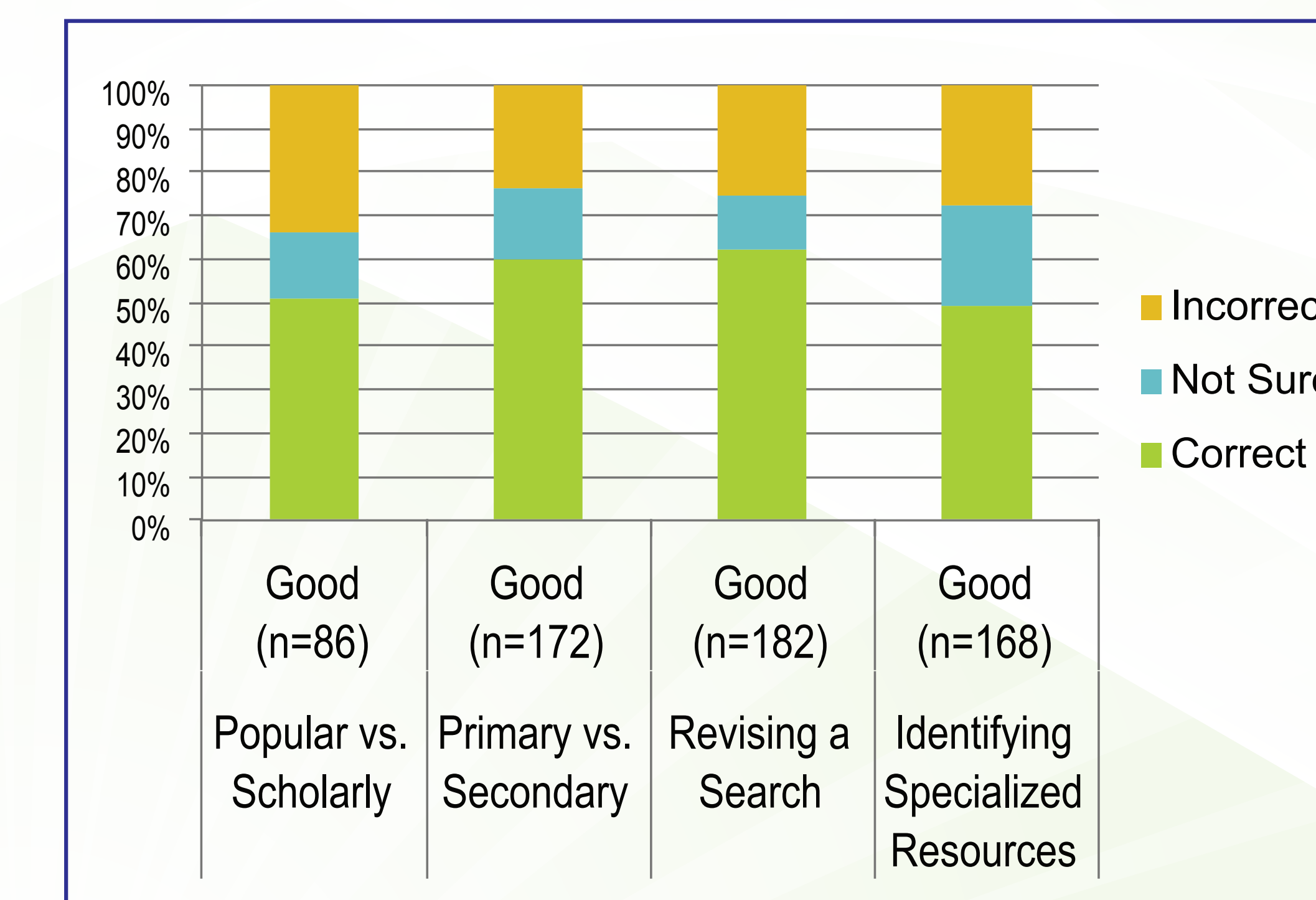
Performance by Students with Self-Rates of "Excellent"



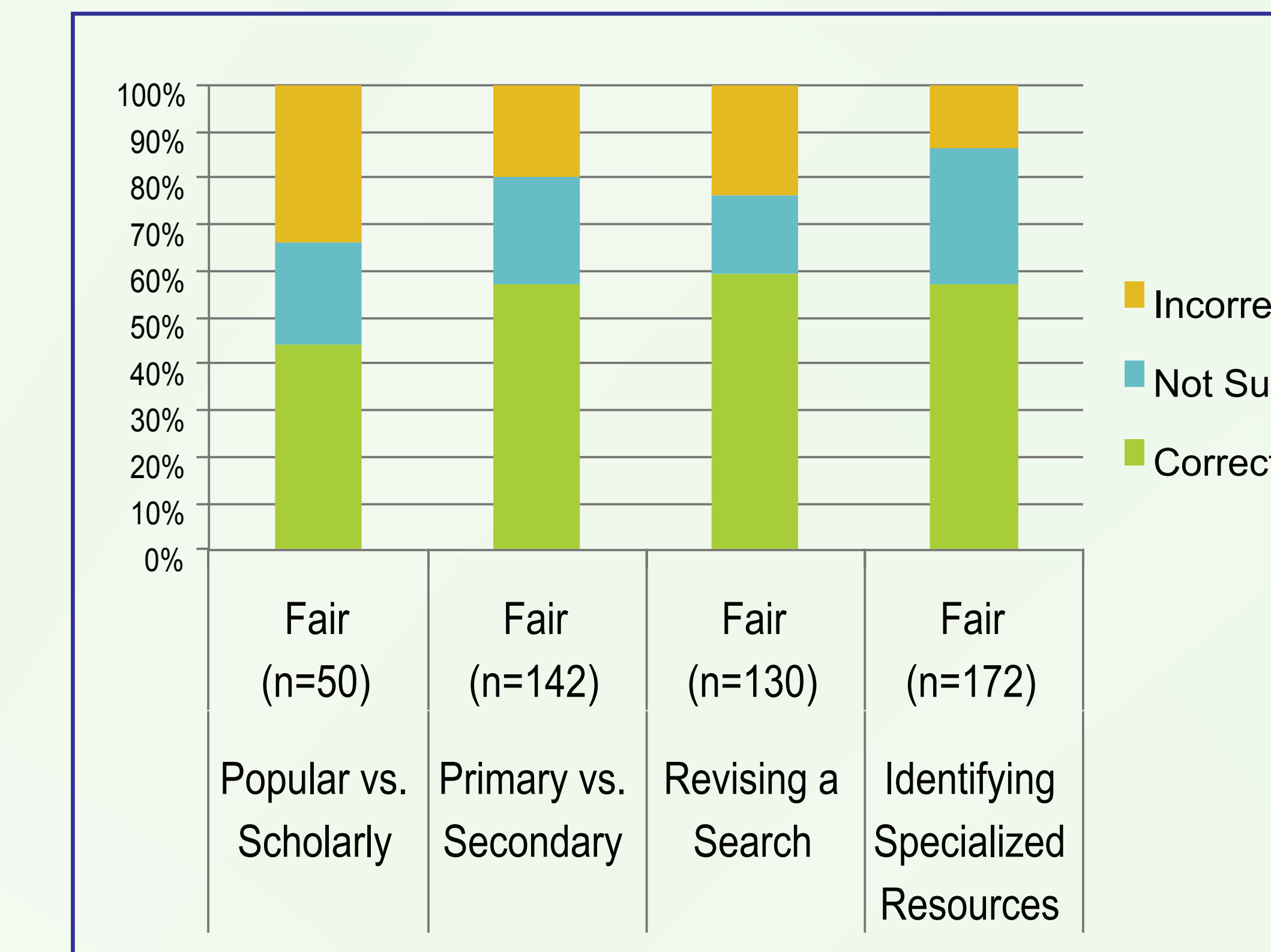
Performance by Students with Self-Rates of "Very Good"



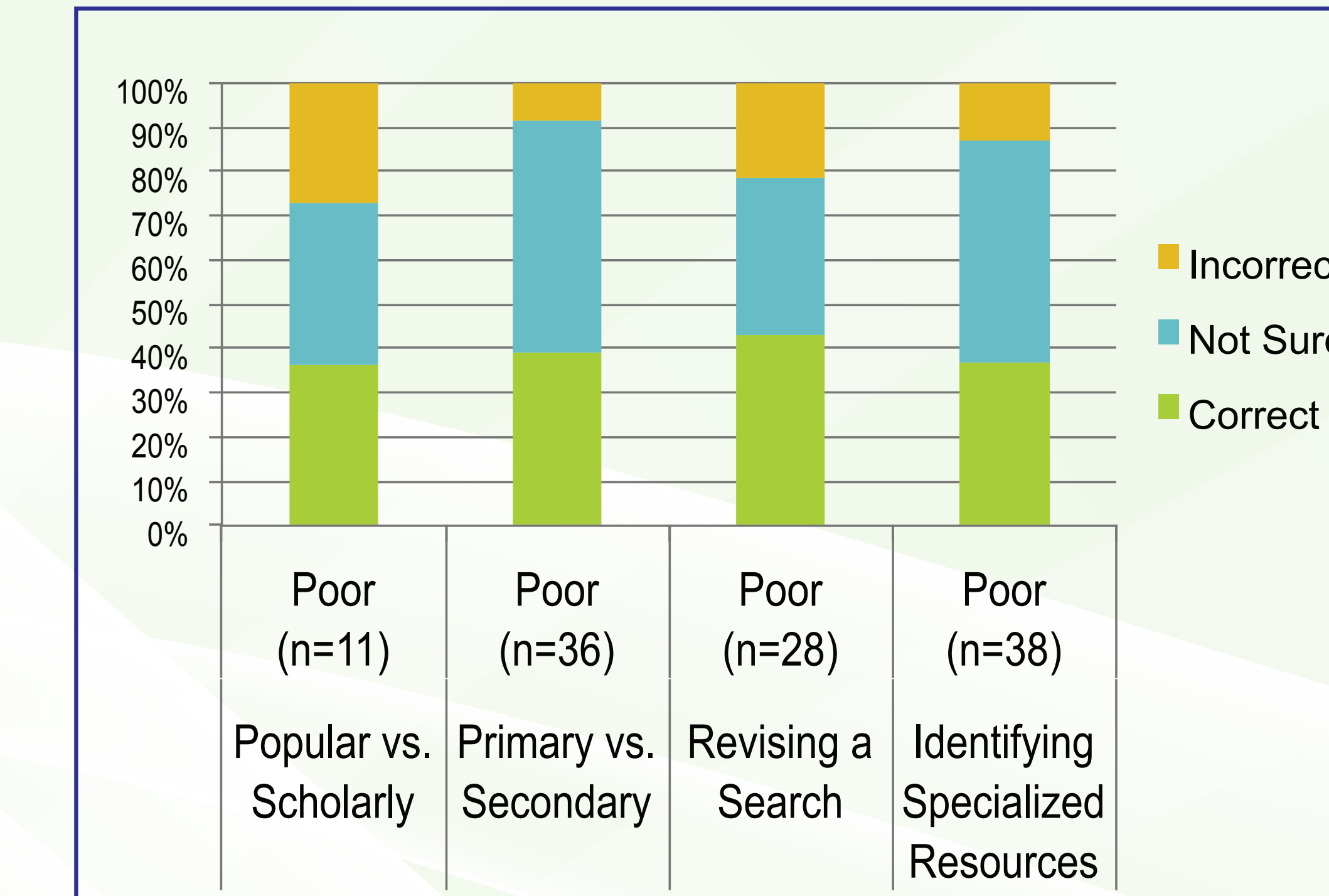
Performance by Students with Self-Rates of "Good"



Performance by Students with Self-Rates of "Fair"



Performance by Students with Self-Rates of "Poor"



Conclusions

- Students had varied self-rate responses to the information literacy tasks
- Those who identify as "Poor" really do have poor skills
- Those who identify as "Excellent" may or may not be as proficient as they think
- The consistency of the incorrect percentages across all self-rate groups indicate that the wording of the question(s) is not an issue
- As proficiency of self-rates increase, there is a corresponding decrease of "Not Sure"; however, this does not influence the number of incorrect responses

Implications

- It is important to obtain information about students' perceptions of their information literacy skills
- Student receptiveness in library instructional sessions may be influenced by their confidence levels
- Students' perceptions of their skills could have major implications on how students behave during information literacy sessions, as well as their likelihood of availing themselves to reference and research services

Further research

- Gain more longitudinal data
- Have the students take a post-information literacy session survey
- Modify lessons plans based on the IL quiz results
- Share the results with HPRF 100W instructors – inform them that their students have high levels of confidence in their abilities, but may not perform in accordance with their skill perceptions

Selected Readings

- Gross, M. (2005). The impact of low-level skills on information-seeking behavior: Implications of competency theory for research and practice. *Reference & User Services Quarterly*, 155-162
- Gross, M., & Latham, D. (2007). Attaining information literacy: An investigation of the relationship between skill level, self-estimates of skill, and library anxiety. *Library & Information Science Research*, 29(3), 332-353
- Gross, M., & Latham, D. (2012). What's skill got to do with it?: Information literacy skills and self-views of ability among first-year college students. *Journal of the American Society for Information Science and Technology*, 63(3), 574-583.
- Gustavson, A., & Nall, H. C. (2011). Freshman overconfidence and library research skills: A troubling relationship? *College & Undergraduate Libraries*, 18(4), 291-306. doi:10.1080/10691316.2011.624953
- Nicholson, L., Putwain, D., Connors, L., & Hornby-Atkinson, P. (2013). The key to successful achievement as an undergraduate student: Confidence and realistic expectations? *Studies in Higher Education*, 38(2), 285-298.
- Stokes, P., & Urquhart, C. (2011). Profiling information behaviour of nursing students: Part 1: Quantitative findings. *Journal of Documentation*, 67(6), 908-932.