Introduction

- The Applied Plant System Experiential Learning Program (APS) took place at the University of Nebraska—Lincoln during the summer of 2017.
- A 24-item survey developed by Retallick and Pate (2009) was administered to the mentors at the beginning of the internship and to the interns at the beginning and end.
- Data from the first cohort of six students who completed the program in 2017, is being used to decide how well the survey, together with weekly journal entries, met project evaluation needs.
- This presentation will focus on four items that reveal interesting differences between interns' perceptions at the beginning and end of the program, and between interns and mentors

Program structure and mentees

Internship Experience Leaders: Based on student selection and match

- Custom internships in university, industry, or federal lab settings
- Skill development in the process of science and decision making

to connection

Weekly Think Tank Sessions

- Leaders: Martha Mamo, Gina Matkin, Moving from task Donald Lee, Walter Schacht, David Lamb, and associated mentors. Team presentations, activities, and exchange of experiences Skill development in systems thinking
 - and team building

Coupled Training

Translational experience for outreach

Science & Literary Extension Leaders: Leah Sandall and Jennifer Keshwani

- Team development of a professional outreach/extension product
- Skill development in communicating science, knowledge application, and developing science outreach components

Mentor	Mentee
	Alyssa Converse
University of Nebraska—Lincoln	University of Nebraska—Lincoln
Virginia Jin	Katja Duerig
USDA-ARS	University of Nebraska—Lincoln
Dirac Twidwell	Phoebe Hartvigsen
University of Nebraska—Lincoln	State University of NY, Genesco
Lisa Durso	Marlynn Cadena
USDA-ARS	University of Texas-El Paso
Jess Spotanski	Elizabeth Fletcher
Midwest Research	Virginia Tech
Laura Thompson	Jackson Stansell
University of Nebraska—Lincoln	Harvard University





Expectations and Experience of Mentoring in an Undergraduate Summer Research Internship

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Contributing to science literacy



1. Mentor as a source of information

- Pre: A mentor is an information sources.
- Post: My mentor was an information source.
- 2. The role of mentors
 - Pre: Mentors play many roles.
- Post: My mentors played many roles.
- 3. Mentor strategies
 - Pre: A mentor demonstrates strategies for accomplishing goals.
 - Post: My mentor demonstrated strategies for accomplishing
 - goals.
- 4. Mentoring process
 - Pre: My mentor and I exchange information.
 - Post: My mentor and I exchanged information.

Mentee responses were not different pre & post, but mentee responses were different from mentor responses, concerning mentee/mentor relationships.

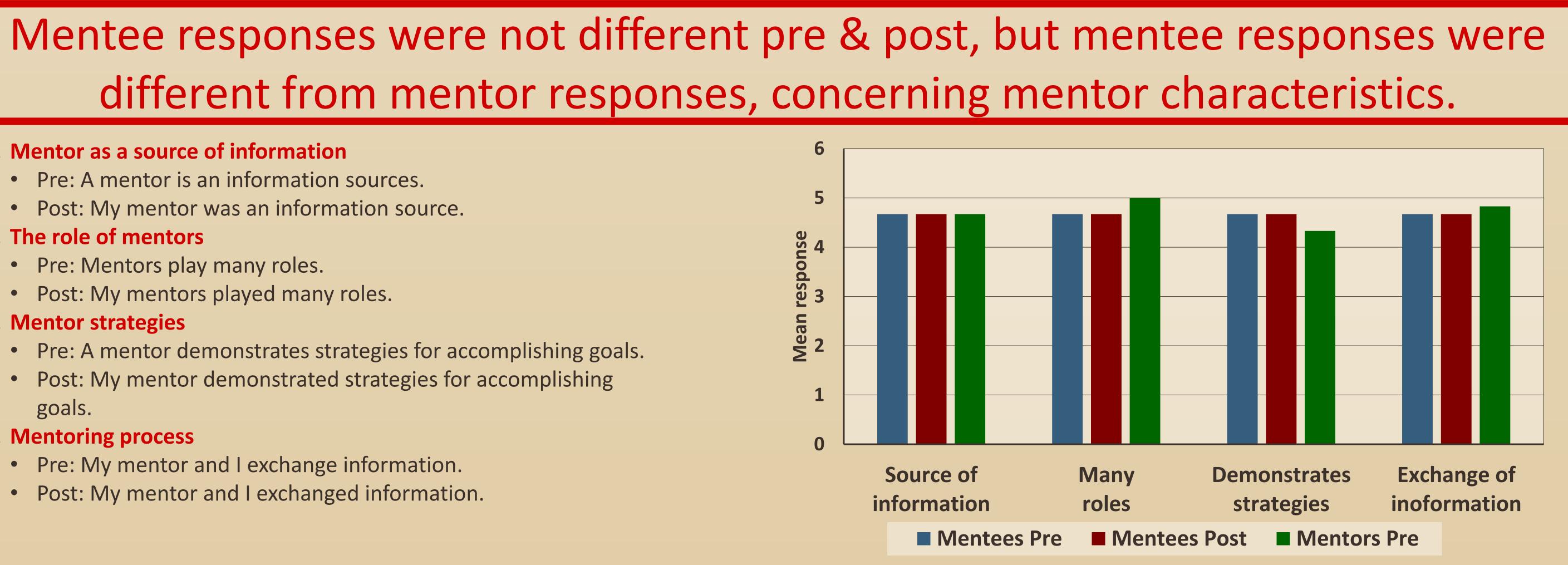
. Mentor influenced professional identity

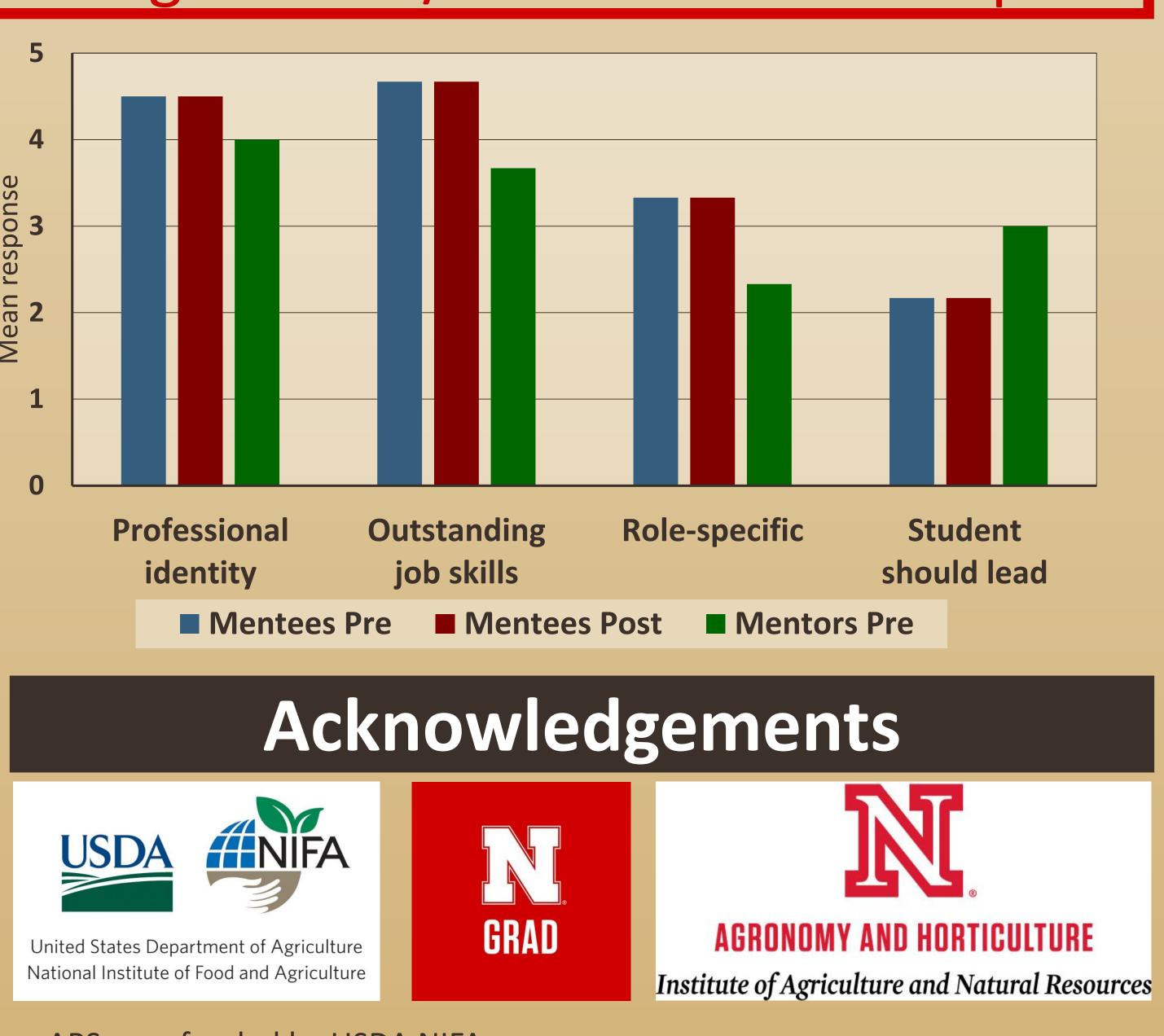
- Pre: A mentor assists the student in developing a sense of professional identity.
- Post: My mentor helped me develop a sense of professional identity.
- **2.** Mentor job skills
- Pre: Mentors demonstrate outstanding job skills.
- Post: My mentor demonstrated outstanding job skills.
- 3. Role-specific model
- Pre: A mentor is a role-specific model in the discipline.
- Post: My mentor was a role-specific model in the discipline.
- 4. Student role in mentorship
 - Pre: The student should lead the mentorship process.
- Post: I was allowed to lead the mentorship process..

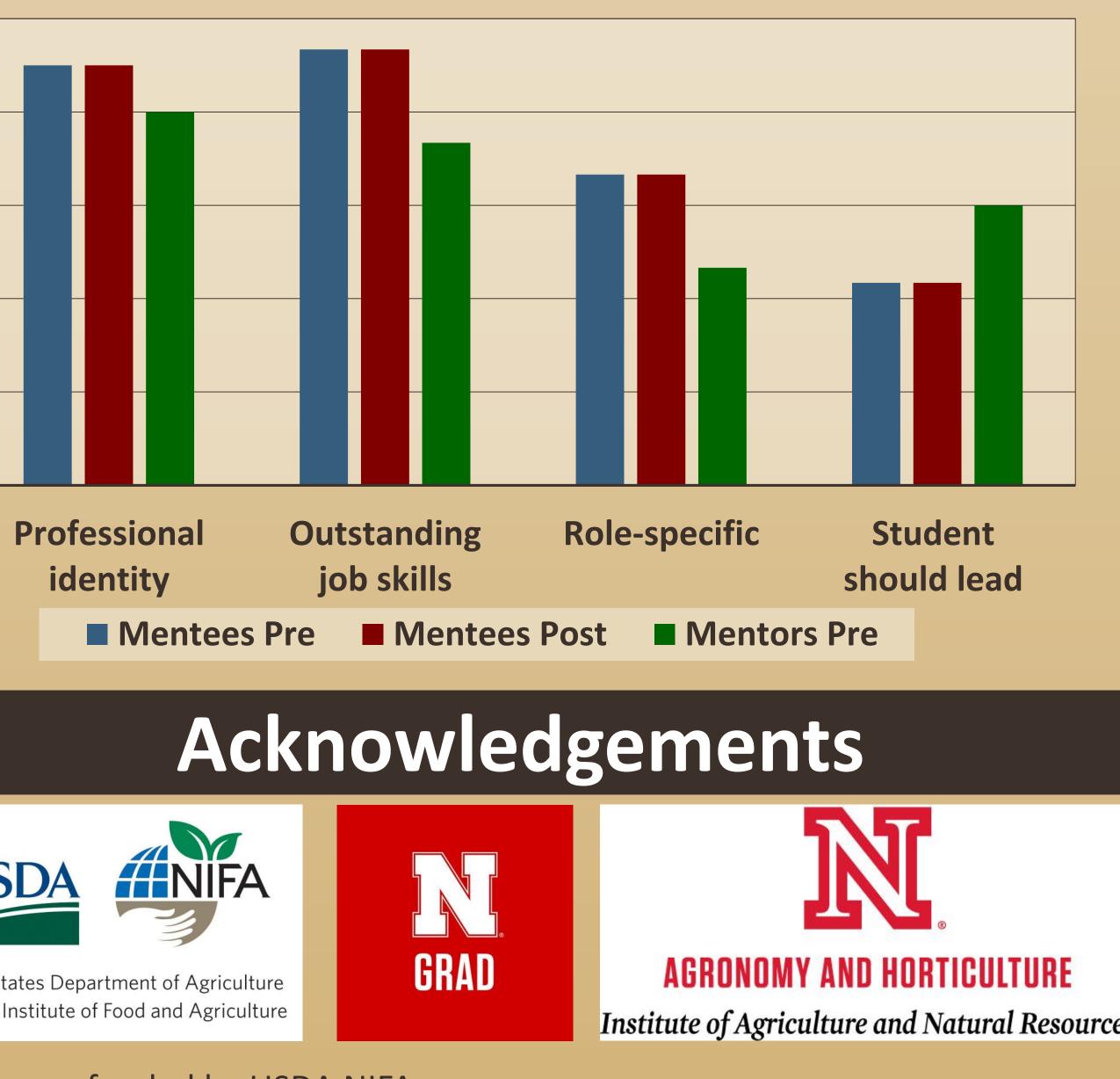
Conclusions

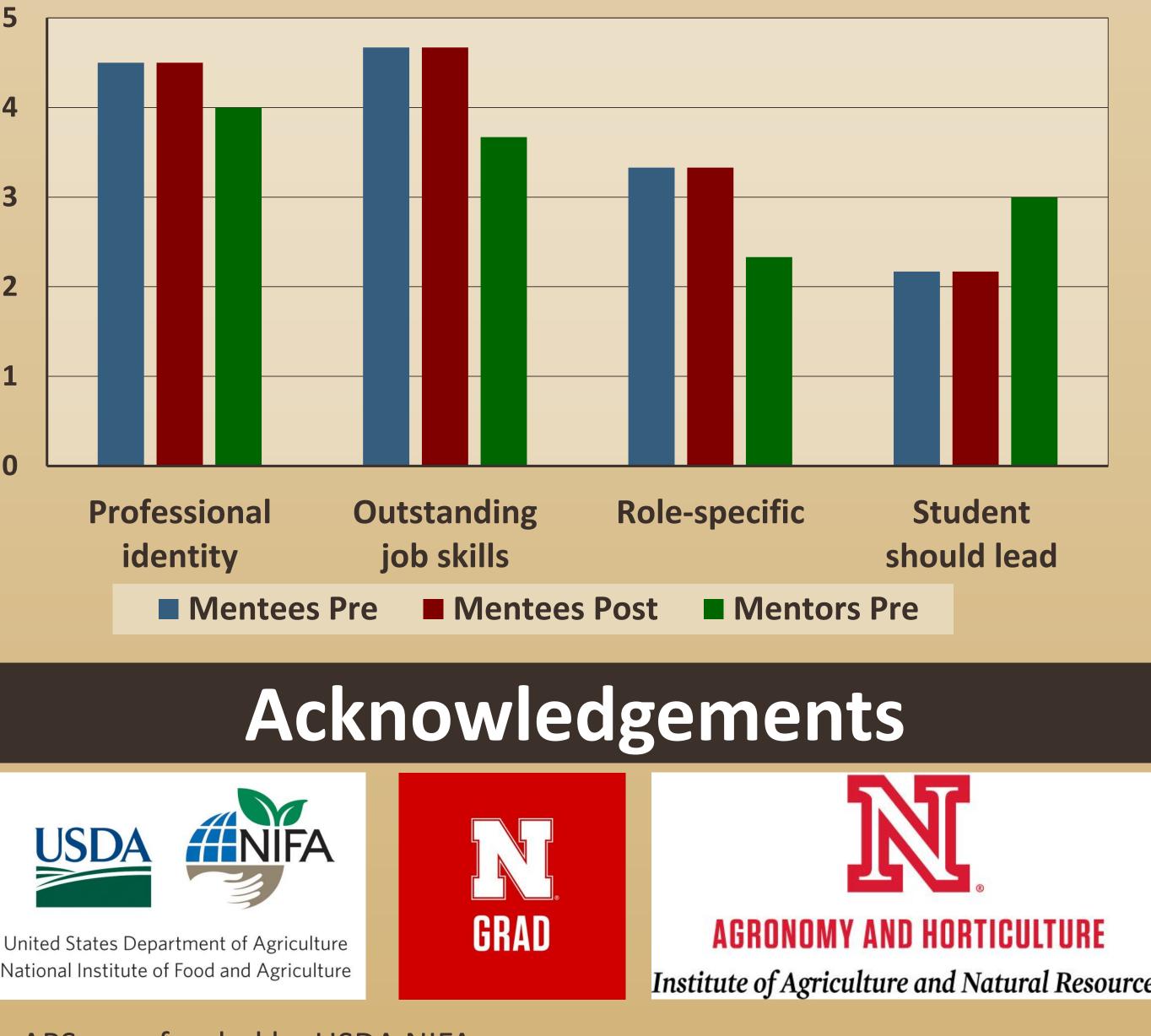
- The summer internship did not change mentee mentorship perceptions.
- Because mentees were selected from a pool of talented applicants, their perception of mentorship may have been influenced by previous mentorship experiences.
- Mentees and mentors did not always agree concerning the role of mentors in mentorship and mentee/mentor relationships.
- Mentors seem to expect more initiative from mentees in mentee/mentor relationships while mentees may expect to be led or inspired.

Survey responses









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- APS was made possible by those who served as mentors.

