Professional Role Confidence:
Expertise, Career-Fit and Relational Confidence

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UC ADVANCE PAID Roundtable 2

By
Carroll Seron
Department of Criminology, Law and Society
University of California, Irvine

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Collaborators

Susan Silbey, MIT
Brian Rubineau, Cornell
Erin Cech, Rice
The Sties of Study
Some Highlights of the Design

6 ½ year panel study, 2003-2008
yearly surveys to panel, n=700
in-depth interviews, years 1 and 4, n=64
bi-monthly diary submissions, years 1-4, n=40.
Overview of Comments

• Situate my work in context of Ong, et al.
• General findings: professional role confidence is key for behavioral persistence—staying in a STEM field—and intentional persistence—plan to enter a STEM professional field.
• The experiences of minority women in engineering: some broader lessons.
• Policy implications.
“Inside the Double-Bind”

- Among other factors, “academic self-concept, self-efficacy, and overall confidence” are key ingredients for persistence.

- The challenges of collaboration: “a practice commonly associated with femininity [that] has been appropriated by the scientific culture with the effect of chiefly helping men and harming women” (Ong 2005: 599).
Toward a more nuanced understanding of self-confidence
Expertise confidence: tasks and competencies required of a professional.

Career-fit confidence: confidence that the professional role will suit the individual.
Findings: Professional Role Confidence

Expertise Confidence:
- Men enjoy significantly larger endowments of expertise confidence than women.
- Expertise confidence particularly significant in predicting behavioral persistence, intention to stay in major.

Career-Fit Confidence:
- Men enjoy significantly larger endowments of career-fit confidence than women.
- Career-fit confidence particularly significant in predicting intentional persistence, plans to be an engineer in five years.
The Experiences of Minority Undergraduates in STEM Fields

For Asian/Asian American and Hispanic students, effects of PRC are significantly stronger, net of controls and compared to Whites;

Suggests that minority students in STEM have to work a bit harder to develop expertise and career-fit confidence.
What of Minority Women in STEM?

-Nine minority women across sites of study;
-Based on interviews in years 1 and 4 (n=64);
-Important note: ALL stayed in a STEM field.

-So, we may ask: What strategies did these minority women deploy to cultivate professional role confidence, particularly career-fit confidence?
STEM and Making a Social Difference
Social Class Matters
Stereotypes
Social Support Networks
Resilience

6 Domains of Resilience

- Secure base
- Social Competencies
- Positive Values
- Talent and Interests
- Friendships
- Education

Resilience
The Courage to Come Back
Professional Role Confidence = Expertise + Career-Fit

What’s next? Relational Confidence

- Dealing with peers, supervisors, mentors, colleagues;

- Comfort with organizational culture: humor, mannerisms, demeanors, dress.
Policy Implications:

Success is about more than expertise.

Required seminars that take seriously career-fit and relational confidence for all entering Ph.D. students;

Guided by literature and experts about forms and challenges of racial/ethnic and gender biases in STEM fields;

Explicit discussion of multiple career paths.
Thank you.

Contact information:

Carroll Seron
Soc Eco II, Room 2373
949 824 6279
seron@uci.edu