ReSEARCH Dialogues Conference Proceedings

ReSEARCH Dialogues Conference Proceedings 2021

Apr 12th, 10:00 AM - 10:00 AM

Those Who Teach Can Do: Skill Development Through Undergraduate Teaching

Stephanie Wells
University of Tennessee at Chattanooga

Samuel Culver
University of Tennessee at Chattanooga

Zachary Swanson
University of Tennessee at Chattanooga

Jill Talley Shelton
University of Tennessee at Chattanooga

Follow this and additional works at: https://scholar.utc.edu/research-dialogues

Those Who Teach Can Do:
Skill Development Through Undergraduate Teaching

Stephanie Wells, Zachary Swanson, Sam Culver, Raiza Barahona & Jill Talley Shelton, PhD
The University of Tennessee at Chattanooga

Cognitive Aging, Learning, & Memory
CALM Lab

Introduction

When entering the workforce or progressing into a graduate program, undergraduate students are expected to possess several technical and psychological skills, as well as transferable skills, often termed "soft skills" (Appleby, 2003).

Research presently supports the idea that undergraduate teaching assistants (TAs) report the acquisition of professional skills through interactions with students and professors during their TA experience (Fingerson & Culley, 2001).

The researchers designed a 39-item TA Perceived Competency Scale to measure student's perceived competency with their "soft" skills (e.g., goal setting, self-control).

The current study assesses students' perceived competencies and expectations of competencies following completion of the TA experience enhanced with experiential learning components such as critical reflection.

Perceived competency has been linked to resilience (Orkaizagirre-Gómar et al., 2020). Similarly, need for cognition influences academic performance when it is regulated by different efficacy beliefs (Elias & Loomis 2002).

Hypotheses

H_1: This scale will effectively capture gains in perceptions of transferable skills and professional abilities following a TA practicum course.
H_2: There will be a significant difference in the variability of perceived competency responses between time 1 and time 2 after adjusting the scale dimensions and prompts.
H_3: We expect to find a significant relationship between resilience, need for cognition, and perceived competency in undergraduate TAs.

THE UNIVERSITY of TENNESSEE UT CHATTANOOGA

Method

Participants: Students in Teaching Practicum and Experiential Learning courses in Spring and Fall 2020

	Total	Gender	Mean Age
Spring TP	42	95% Female	21.3
Spring EL	29	79.3% Female	22.3
Fall TP	38	92.1% Female	21.7
Fall EL	57	84.2% Female	20.1

❖ Students completed the Perceived Competency Scale (PCS) and individual difference measures at the beginning and end of the semester, with measures of COVID impact also being completed at the end of semester

❖ Perceived Competency Scale Subscales:
  ● Attention to detail, Dependability, Integrity
  ● Cooperation, Self-Control, Stress Tolerance
  ● Initiative, Flexibility, Analytical Thinking
  ● Persistence, Communication, Goal Setting

❖ TA PCS revised Fall 2020. Changes include:
  ● Addition of a visualization prompt
  ● Shift from 7-point Likert scale to 5-point Likert-style scale
  ● Addition of two contextualizing questions

Results

Sp2020 Perceived Competency Sums
Total Competency Score (273 max)
Spring 2020 TAs — Spring 2020 Psy of Aging
Pre-test ■ Post-test

Fa2020 Percieved Competency Sums
Total Competency Score (195 max)
Fall 2020 TAs — Fall 2020 Psy of Aging
Pre-test ■ Post-test

Table 1. Correlations between Individual Difference Variables

	1	2	3	4
1. Perceived Competency	—	—	—	—
2. Impact of COVID-19	-0.09	—	—	—
3. Perceived Stress	-0.16*	0.57**	—	—
4. Resilience	0.43**	-0.23**	-0.42**	—
5. Need for Cognition	0.43**	-0.11	-0.26**	0.39**

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Sample Size N = 154-163

Conclusions

Overall, TAs are reporting high levels of perceived competence, both at the beginning and end of their experience.

The TA Perceived Competency Scale should be an important contribution in the field of psychology education

Scale development (including factor analysis) is still in progress, but with promising ongoing data collection. However, there does seem to be more variability in PCS ratings following the scale adjustments.

Interesting connections may exist between the TA PCS and individual differences as greater competency was associated with lower stress, higher resilience & need for cognition, and even greater confidence dealing with COVID-related obstacles.

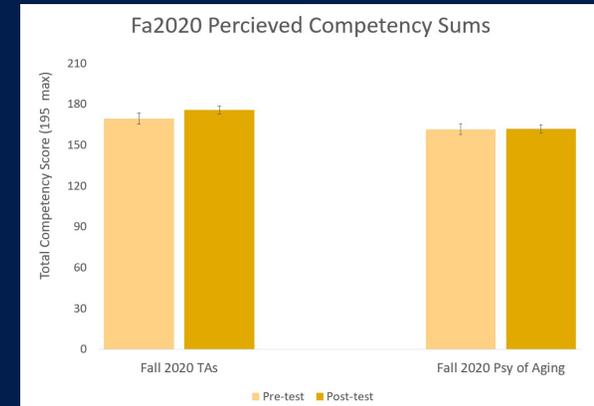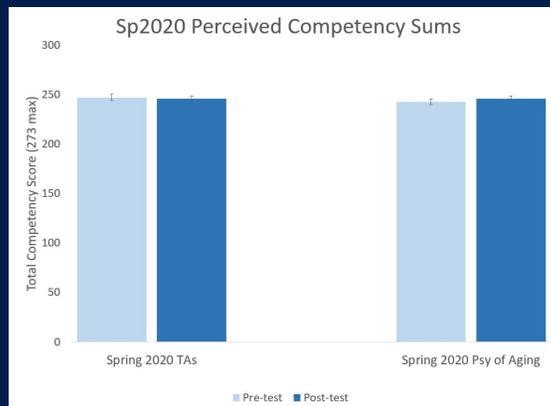SOCIETY for the TEACHING of PSYCHOLOGY
Division Two of the American Psychological Association

References

Appleby, D. C. (2003) The Savvy Psychology Major: Kendall Hunt Publishing Company.

Elias, S. M., & Loomis, R. J. (2002). Utilizing need for cognition and perceived self-efficacy to predict academic performance. Journal of Applied Social Psychology, 32(8), 1687-1702. doi:10.1111/j.1559-1816.2002.tb02770.x

Fingerson, L., & Culley, A. B. (2001). Collaborators in teaching and learning: Undergraduate teaching assistants in the classroom. Teaching Sociology, 299-31

Orkaizagirre-Gómara, A., Sanchez De Miguel, M., Ortiz de Elguea, J., & Ortiz de Elguea, A. (2020). Testing general self-efficacy, perceived competence, resilience, and stress among nursing students: An integrator evaluation. Nursing & health sciences, 22(3), 529-538.