Engaging Undergraduate Nutrition Students in Research: A Graduate Student Mentorship Approach

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Engaging Undergraduate Nutrition Students in Research: A Graduate Student Mentorship Approach

Authors: MJ Ludy, RM Tucker, AP Crum, CA Young

Background: Research skills are crucial for making evidence-based ethical decisions in dietetics practice (KRDN 1.1). Students require development of skills that will enable them to successfully serve as mentors/preceptors (KRDN 2.8). Opportunities to participate in undergraduate research and graduate mentorship are often limited. A research model where graduate students, under the supervision of RDN faculty, mentor undergraduate students was developed to address these issues.

Methods: Seniors enrolled in a research methods course and undergraduates at all levels were invited to assist with data collection in an on-going research project, alongside two experienced masters-level research assistants. All students completed ethical training and conducted in-depth testing that included anthropometric, blood pressure, and taste/smell sensitivity testing. Students volunteered with a graduate student who oversaw data collection, trained students on proper equipment use and communication skills, and delegated tasks.

Results: Qualitative feedback was overwhelmingly positive. Undergraduate students gained a greater appreciation for the research process; 32% voluntarily continued to assist with data collection for a second semester. Graduate students noted improvement in communication, mentoring, and research skills. Faculty viewed this as a feasible mechanism for increasing student engagement with research while balancing competing demands for time.

Conclusions: Involving graduate students in the mentoring of undergraduate research presents an under-utilized resource for (1) engaging future RDNs in the research process and (2) empowering graduate students to become preceptors.

Funding Disclosure: None

Learning Objective (≤500 characters): Participants will be able to identify the benefits of involving graduate students as mentors for undergraduate research.

Learning Code (select 3):
- #1 – 9000 Research
- #2 – 6080 Training, coaching, mentoring
- #3 – 7200 Team building
Engaging Undergraduate Nutrition Students in Research: A Graduate Student Mentorship Approach

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Abstract

Background: Research skills are crucial for making evidence-based ethical decisions in dietetics practice (KRDN 1.1). Students require development of skills that will enable them to successfully serve as mentors/preceptors (KRDN 2.6). Opportunities to participate in undergraduate research and graduate mentorship are often limited. A research model where graduate students, under the supervision of RD faculty, mentor undergraduate students was developed to address these issues.

Methods: Seniors enrolled in a research methods course and undergraduates at all levels were invited to assist with data collection in on-going research project, alongside two experienced masters-level research assistants. All students completed ethical training and conducted in-depth testing that included anthropometric, blood pressure, and taste/smell sensitivity testing. Students volunteered with a graduate student who oversaw data collection, trained students on proper equipment use and communication skills, and delegated tasks.

Results: Qualitative feedback was overwhelmingly positive. Undergraduate students gained a greater appreciation for the research process; 32% voluntarily continued to assist with data collection for a second semester. Graduate students noted improvement in communication, mentoring, and research skills. Faculty viewed this as a feasible mechanism for increasing student engagement with research while balancing competing demands for time.

Conclusions: Inviting graduate students in the mentoring of undergraduate research presents an under-utilized resource for (1) engaging future RDNs in the research process and (2) empowering graduate students to serve as preceptors.

Learning Objective: Participants will be able to identify the benefits of involving graduate students as mentors for undergraduate research.

Background (Cont.)

• The nationwide shortage of preceptors is one of the greatest issues facing the dietetics profession (Crayton et al., 2015).

Methods

• Seniors (n=48) in an undergraduate research methods course: • Completed ethics training (Collaborate Institutional Training Initiative, www.citiprogram.org) • Collected anthropometric, blood pressure, and taste/smell sensitivity data for an on-going research project (Laone et al, 2015)

• Graduate students (n=2) in a combined Master’s of Food & Nutrition and Internship Program in Nutrition & Dietetics: • Trained students on equipment use and communication skills • Supervised data collection • Delegated tasks

Research In Action

Waist Circumference
Air-Displacement Plethysmography
Blood Pressure
Taste & Smell Sensitivity

Results and Discussion

Undergraduate Student Reactions

"I have received incredibly valuable experiences that I know for a fact will be transferable."

Graduate Student Reactions

"I am now more confident in leading research projects/better mentors than I ever have because of this opportunity. My hope is in the future when pursuing my thesis and PhD, I will be more confident in my abilities to conduct research and train others to do the same. Conducting and participating in research in the core of nutrition, so I know I will be ready to tackle more opportunities that come my way."

Conclusions

• Involving graduate students in the mentorship of undergraduate research assistants presents an opportunity for: • Engaging future RDs in the research process and • Empowering graduate students to serve as preceptors.

References
