

Self-Efficacy Among Students in Various Dietetics Programs

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BACKGROUND

Self-efficacy, as described by Bandura, is a person's belief in their ability to influence events that affect their lives, or their ability to accomplish a given task. In education programs, student perceptions are often overlooked; yet, have been shown to contribute to motivation, engagement, and academic performance. Conversely, a lack of self-efficacy can be a barrier to professional and effective clinical practice.

Accreditation standards in nutrition and dietetics are competency-based. However, students can achieve competence and still not feel prepared to perform the given task. For this reason, student perception is an essential component to the success of training registered dietitian nutritionists (RDN). As the dietetics profession prepares to advance minimum education requirements to the master's degree level in 2024, the Accreditation Council for Education in Nutrition and Dietetics (ACEND) published a Future Education (FEM). The graduate-level program is designed for students without prior dietetics education to complete didactic coursework, supervised practice, and a master's degree, in order to sit for the RDN registration exam upon program completion. We hypothesized that students entering a dietetics program at the graduate level would have higher self-efficacy than those entering at the undergraduate level. **The objective of this study is to explore clinical self-efficacy of students in various dietetics programs.**

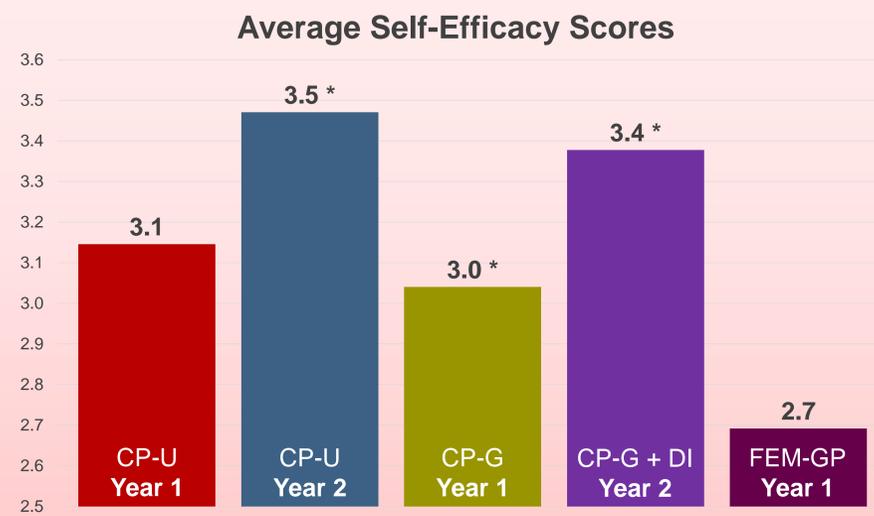
METHODS

- Students enrolled in a Medical Dietetics program at The Ohio State University (OSU) during the 2020-2021 academic year were invited to participate in this study.
- A self-efficacy survey and brief demographic questionnaire were administered through a secure web-based platform: Research Electronic Data Capture (REDCap) during the months of December and January.
- The Self-Efficacy Scale for Nutrition Students in the Clinical Setting (Todd et al.) is a validated survey consisting of 20 statements rated on a 4-item Likert scale ranging from 'not at all confident' to 'fully confident'. Statements were originally mapped from ACEND 2012 competencies for coordinated programs (CRD 2.8, 2.10, 3.1.e) which correlate with current ACEND 2017 competences for coordinated programs (CRDN 2.4, 2.7, 3.1).
- This study was approved by OSU Institutional Review Board.

STATISTICAL ANALYSIS

- For purposes of analysis, students were classified as according to their year in the program: first year vs. subsequent year, and by their undergraduate / graduate standing with the university. These identifiers align with timing of MNT courses and supervised practice experience.
- Descriptive statistics describe sample demographics.
- Mean self-efficacy scores were compared using independent samples t-test and ANCOVA.
- Internal consistency determined using Cronbach Alpha (0.945).

Study Participants	
Participants, n (%)	44 (100%)
Female, n (%)	38 (86%)
Male, n (%)	6 (14%)
Age, years ± SD	25 ± 4
Program Type, n (%)	
• Coordinated Undergraduate (CP-U)	17 (39%)
• Coordinated Graduate (CP-G)	7 (16%)
• Dietetic Internship (DI)	8 (18%)
• FEM Graduate Program (FEM-GP)	12 (27%)
Analysis Groups, n (%)	
• Year 1: CP-U	11 (25%)
• Year 2: CP-U	5 (11%)
• Year 1: CP-G	5 (11%)
• Year 2: CP-G + DI	11 (25%)
• Year 1: FEM-GP	12 (27%)



*Significantly different than FEM-GP

RESULTS

Self-Efficacy

Highest scores among all students (mean score >3.5)

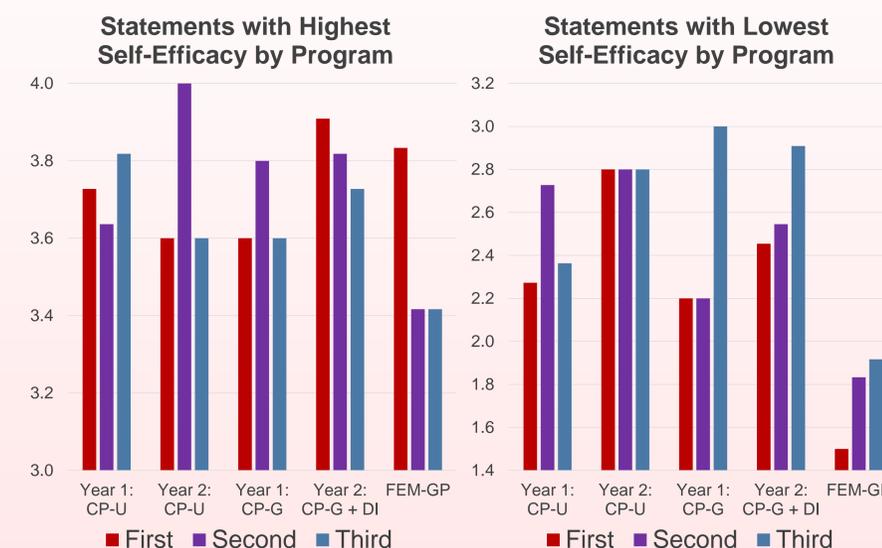
Individual Statements:

I feel confident in my ability to...

- Adhere to the Code of Ethics for the Profession of Dietetics
- Start a conversation with the patient
- Seek assistance from other professionals when needs are beyond my scope of practice

Lowest scores among all students (mean score ≤2.5)

- Identify drug/nutrient interactions
- Review patient medications
- Demonstrate negotiation skills within a clinical setting



CONCLUSIONS

First year dietetics students demonstrated lower self-efficacy, even at the graduate level. Self-efficacy was higher in all students after experience in supervised practice, which is consistent with the literature. Students reported lowest self-efficacy in their ability to understand medications, and ability to demonstrate negotiation skills in the clinical setting. This data supports incorporation of experiential learning to promote student self-efficacy.