
As I sit and reflect on our many roles and responsibilities in dietetics education, I am reminded about how many students and interns depend on us for the outcomes of their education and their future in our diverse field. As we all know, we are on the threshold of very important changes in dietetics education, and we are tasked with helping shape that future, so our responsibilities, at the moment, are even bigger. During FNCE in October, the NDEP Council had the opportunity to meet with ACEND leaders to discuss the Future Education Model draft standards for the proposed Master, Bachelor, and Associate Degree programs. During the NDEP Council meeting, your NDEP chairs and Regional Directors shared their input and concerns, and the ACEND representatives provided much clarification and feedback. During the ACEND/CDR Educators’ Round Table, many NDEP members, educators, and preceptors had the opportunity to meet in small groups to share their perspectives and provide input. My overall take-away from those sessions is that, as NDEP members, we are in the position to influence the outcome of the Future Model Standards, and ACEND is very interested in our input. Here are some things to keep in mind as you formulate your feedback:

- Provide substantive feedback and realistic alternatives with strong, supporting arguments. It isn’t enough to argue that a proposed standard or competency isn’t realistic or you disagree with it.
- Provide examples of best practices and methods to meet the desired competencies and outcomes.
- ACEND is very interested in feedback on the competencies. It is my understanding that the ACEND Standards Committee’s expectation is that all performance indicators, not just the competencies, would need to be met. (It is not intended to be like the PDP where performance indicators are suggested ways in which the competencies can be met.) If this seems unrealistic to you, be sure to address this in your comments.

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• ACEND is aware that “technician” is not be seen as an acceptable title for the Bachelor’s trained practitioner. They are interested in suggestions for other names/titles.

• ACEND has not been receiving as much feedback on the Associate-level standards as the Bachelor’s and Master’s. Please provide feedback on these standards, as well.

• There is some confusion between the 2017 Standards and the Future Model Standards. It is the Future Model Standards that are currently open for public comment. The 2017 Standards are the updates to the 2012 standards. These go into effect in January 2017.

• There is some confusion between the 2024 master’s degree requirement for eligibility to take the RD exam and ACEND’s Future Model Standards. The 2024 requirement is a CDR (Commission on Dietetic Registration) requirement. It is not related to ACEND’s Future Model Standards.

In summary, ACEND assured NDEP members and educators that required adoption of the Future Model Standards is many years (20 or more) in the future. Initially, they are hoping that 60 programs (of all three types, master, bachelor, and associate) will apply to be voluntary Demonstration (pilot) Programs accredited under the future education model standards in a first round, with another 60 in a later round. They anticipate that it may take 2-3 years for these demonstration programs to get up and running. Then several years of program graduates will be monitored and tracked for pass-rate, employment, level or practice, etc., and data on program operations and needed resources will be collected. It is only after they evaluate the outcomes data that decisions will be made about how the standards will actually look.

In other news, NDEP’s seven areas have been realigned into six areas, or regions – West Coast, West Central, North Central, South Central, Northeast, and Southeast. One of the changes that you will see as a result is that for 2017, there will be three area (or regional) meetings instead of four:

• Western -- Asilomar Conference Center, Pacific Grove, CA, March 12-14, 2017
• Central – Hyatt Regency Hotel, Louisville, KY, March 30-31
• Eastern – Embassy Suites by Hilton Inner Harbor, Baltimore, MD, April 2021

Feel free to attend any one of the three meetings. Our goal is to standardize the agendas so that all NDEP members will receive consistent information regardless of which meeting they attend. In addition, we hope to organize the meetings to allow for more roundtables and working sessions, rather than focusing on presentations. If you have any suggestions, please contact your Regional Director. Their names are listed on the NDEP website at http://www.ndepnet.org/. Registration and additional information will be available on the NDEP website in January.

Lastly, nominations for the 2017 Outstanding Educator are due to your NDEP Regional Directors on January 13, 2017, and nominations for the 2017 Outstanding Preceptor Awards are due to the NDEP Preceptor Director on March 3, 2017. Submission information is available for both awards on the NDEP website.

In closing, it was a pleasure to represent all of you at FNCE as your NDEP Chair this year. Please know that the NDEP Council and I are here to represent all of yours (educators and preceptors) and your students’ and interns’ interests in all matters related to dietetics education. As always, we are open to your suggestions or feedback.

Best Wishes for a Wonderful New Year!

Robyn
From the Editor...

Colleen McCrief, MS, RDN
Director, Didactic Program in Dietetics
The Sage Colleges
Troy, NY
mccric@sage.edu

The spring 2017 edition of the NDEP-Line will not be published this year. This is temporary and editions will resume in summer 2017. Submissions for the summer edition will be accepted anytime through May 1.

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• Author(s)
List author with first name, initial (if any) last name, professional suffix, and affiliation (all in italics) below the title of the article, i.e., For NDEP members or other dietetic educators:
Anne A. Anderson, PhD, RD, LD, American University

For authors in other fields/disciplines:
Anthony T. Vicente, PhD, Director, Nutrigenomics Laboratory, American Human Nutrition Research Center on Genetics at American University

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Before the article, give the primary author’s complete contact information including program affiliation, phone, fax and email address.

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All submissions for the publication should be submitted to the editor as an e-mail attachment as an MS Word file. Indicate the number of words after author's contact information.

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Spring: February 1
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Winter: November 1

A submission may be returned to the primary author for revision if it does not conform to the style requirements.

• Editor
Colleen McCrief, MS, RD
The Sage Colleges
Phone: 518-244-2043
mccric@sage.edu

• Reprint permissions request or back issues:
Contact Colleen McCrief @ mccric@sage.edu
Clinical Nutrition Management (CNM) DPG
Kerry Scott, RDN, CD
Clinical Nutrition Management DPG Membership Chair
Kerry.scott@providence.org
509-474-7415

Do you come across students in your courses and programs that stand out, and you know they will one day make a good leader? There are those students who have a plan and know they will one day work towards a management position, but there are others who perhaps are quiet leaders that peers respect and gravitate towards.

As you come across these students potential leaders for our profession, please keep in mind the Clinical Nutrition Management (CNM) DPG within the Academy. The word “manager” in the title can be misleading, as the DPG both fosters and encourages leadership development in non-traditional ways, as well. With several sub-groups within the DPG including Informatics, Quality Process Improvement and new this year Pediatric Management, members can learn about and specialize in areas other than more traditional management topics.

Through membership in the CNM DPG, a dietitian or student could become familiar with topics related to the business of dietetics, such as budgeting, staffing, communication styles and regulatory processes, before stepping into a role for which they are responsible for these tasks. In addition, wouldn’t it be wonderful to develop a silent leader who might not have a management title, but has a role with positive influence on employees and peers!

The CNM DPG offers many member benefits including a quarterly newsletter that offers a CEU article, webinars on timely topics, an electronic mailing list with valuable sharing, a resource library, and an annual symposium for education and networking. This year the annual symposium will be in St. Petersburg, FL March 18th – 21st, 2017. Please encourage students to visit our web site and find out more about this practice group at www.cnmdpg.org.
The Impact of DPD Program Admission Criteria on RDN Exam Pass Rates

Heather Payne-Emerson, PhD, RDN, LD
Director, Didactic Program in Dietetics
Department of Family and Consumer Sciences
Western Kentucky University
heather.payne-emerson@wku.edu
270-745-6356
Karen G. Mason, PhD, RDN, LD, Western Kentucky University

The pass rate on the registration examination for dietitians is one of the primary means by which didactic programs and dietetic internships are evaluated by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). ACEND requires at least an 80% pass rate for both the five year first time and one year pass rates according to the 2012 accreditation standards. Although the 2017 standards will no longer require monitoring of the first time pass rate, programs must still maintain a one year pass rate of 80%. Those programs not meeting this benchmark must submit a pass rate improvement plan and are subject to monitoring or withdrawal of accreditation. Consequently, monitoring and improving pass rates are major areas of program director focus.

In addition to the pass rate guidelines, the 2012 and 2017 accreditation standards further require programs to develop admission criteria as a means of assessing the ability of program applicants to succeed in the program. Although obtaining an internship is a competitive process, as evidenced by the most recent national match rate of 51%, we have observed within our didactic program that students who are not as strong academically do become matched to internship programs. These students often struggle to pass the RDN exam. Thus, not only are program admission criteria necessary for ensuring student success within didactic programs, but also for maintaining and improving RDN exam pass rates.

Our didactic program revised admission criteria in 2009 in an effort to improve the program pass rate. After review of curricular and other factors, the most likely contributing factor to the pass rate was determined to be insufficient admission criteria. It was anticipated that more rigorous requirements would improve the pass rate by improving the qualifications of students that entered the didactics program. Revisions were made based on characteristics that the DP director and program faculty observed to be associated with passing the RDN exam on the first attempt. Of particular note is the establishment of a minimum ACT score of 20. To establish this criterion, ACT and RDN exam scores for those students who released their names on pass rate reports were tracked for approximately 5 years. A score of 20 or higher tended to predict successful completion of the RDN exam, although a formal statistical analysis was not performed. In addition, foundational nutrition, science and math courses were included in admission requirements to ensure adequate scientific reasoning skills. In 2013 the admission criteria were further revised such that a grade of B, rather than a C, or better was required in HMD 211 Human Nutrition. This change was made 1) to ensure program applicants had sufficient knowledge and aptitude in human nutrition and 2) because those students who made a C in this introductory course typically did not meet GPA admission requirements. Even though such students did not factor into the pass rate, this criterion helped students and advisors to determine earlier if the student could eventually be admitted to the program. The admission criteria prior to and after fall 2009 are outlined in Table 1.
Table 1. DPD Admission Criteria at Western Kentucky University

<table>
<thead>
<tr>
<th>DPD Admission Criteria Prior to Fall 2009</th>
<th>Revised DPD Admission Criteria as of Fall 2009</th>
<th>Additional Revisions to DPD Admission Criteria as of Fall 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A minimum GPA of 2.7 on at least 24 credit hours.</td>
<td>• Completion of 30 credit hours</td>
<td>• B or better in HMD 211 Human Nutrition</td>
</tr>
<tr>
<td>• Specific courses, including HMD 211 Human Nutrition, HMD 151 Food Science and CHEM 105 Fundamentals of College Chemistry, should be a part of these 24 credit hours.</td>
<td>• GPA of 3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• C or better in: HMD 211 Human Nutrition, CHEM 105 Fundamentals of College Chemistry, MATH 116 College Algebra, and BIOL 131 Human Anatomy and Physiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ACT score of 20 or higher or SAT (critical reading + math) of 950</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 2, the above changes first began to influence the pass rate in 2014. The lack of an immediate impact demonstrates the first of four principal challenges our program has faced in improving the pass rate through revision of admission standards. First, although the admission criteria became effective in fall 2009, only students admitted to the University (not those that simply apply to the program) in fall 2009 or later were required to meet the new criteria according to guidelines regarding program changes at Western Kentucky University. Thus, students under the old admission criteria continued to affect the pass rate for years after the new criteria were established. At the time the admission requirements were revised in 2009, it was projected that the revisions would not significantly impact the pass rate until 2014 or 2015. As predicted, a notable improvement in the first time and one year pass rates occurred for 2014 test takers (Table 2). However, in 2015 the pass rate subsequently declined. One reason for this may be that students admitted under the old admission criteria continued to affect the pass rate for years after the new criteria were established. At the time the admission requirements were revised in 2009, it was projected that the revisions would not significantly impact the pass rate until 2014 or 2015. As predicted, a notable improvement in the first time and one year pass rates occurred for 2014 test takers (Table 2). However, in 2015 the pass rate subsequently declined. One reason for this may be that students admitted under the old admission criteria tested for the first time in 2015. When those students admitted under the prior admission standards were removed from the 2015 analysis, the first time pass rate improved to above the minimum ACEND requirement (Table 2). In addition, it is noted that the pass rate increased in 2009 and 2010. However, this was a transient improvement that could not have resulted from admission criteria revision for reasons discussed above.

The second challenge is related to the first in that students who fail to match to an internship initially may be matched on subsequent attempts, sometimes years beyond graduation. This is particularly problematic if these students fall under former admission criteria and would not have been admitted to the program under the revised requirements. Further, once these students do become matched to programs, a period of years may have passed between the DPD and completion of a dietetic internship, which may place them at increased risk of not passing the exam. Similarly, graduates who match to an internship on the first attempt, but wait a period of years to take the RDN exam, as has occurred in our program, are at increased risk of not passing the exam.

The third challenge is related to establishing trends in the effectiveness of admission criteria. Since test takers have the option of not releasing their names, it is often impossible to determine characteristics of students who do not pass the exam on the first or multiple attempts. Pass rate reports identify the date of DPD completion even for those students who choose not to release their names. This allows us to only estimate the student’s date of admission to the DPD and subsequently the set of admission criteria applicants were admitted under.

The fourth challenge is specific to smaller programs such as ours. In most years, the number of program graduates taking the RDN exam is typically in the low teens and at times below 10. Thus, even one or two students not passing the exam has the potential to greatly impact the pass rate. In essence, every student is crucial for programs with lower enrollment numbers.
Table 2. Program Pass Rates on the Registration Examination for Dietitian Nutritionists

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students Taking the Exam</th>
<th>Number of Students Passing on the First Attempt</th>
<th>Number of Students Passing within One Year of First Attempt</th>
<th>First-Time Pass Rate</th>
<th>One-Year Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to admission criteria change: 2004-2008</td>
<td>40</td>
<td>28</td>
<td>N/A</td>
<td>70%</td>
<td>N/A</td>
</tr>
<tr>
<td>2009</td>
<td>7</td>
<td>7</td>
<td>N/A</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>2010</td>
<td>11</td>
<td>9</td>
<td>N/A</td>
<td>82%</td>
<td>N/A</td>
</tr>
<tr>
<td>2011</td>
<td>14</td>
<td>10</td>
<td>13</td>
<td>71.43%</td>
<td>92.86%</td>
</tr>
<tr>
<td>2012</td>
<td>11</td>
<td>8</td>
<td>9</td>
<td>72.73%</td>
<td>81.82%</td>
</tr>
<tr>
<td>2013</td>
<td>13</td>
<td>9</td>
<td>10</td>
<td>69.23%</td>
<td>76.92%</td>
</tr>
<tr>
<td>2014</td>
<td>14</td>
<td>12</td>
<td>14</td>
<td>85.71%</td>
<td>100.00%</td>
</tr>
<tr>
<td>2015</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>75.00%</td>
<td>75.00%</td>
</tr>
<tr>
<td>2015*</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>85.71%</td>
<td>85.71%</td>
</tr>
</tbody>
</table>

*2015 Pass rate excluding student admitted under prior admission criteria

It should be noted that revisions to program admission criteria were a part of a comprehensive pass rate improvement plan. These changes could have begun to impact the pass rate to some extent beginning with 2011 and 2012 test takers, with the full effect evident in 2014 and 2015. Since the full effect of these other changes was anticipated to be visible at the same time as the effect of the revisions to admission standards, it could be argued that the improvements we have noted in the pass rate are not solely due to admission criteria. However, it is of interest that no improvements in the pass rate were seen in 2011, 2012 or 2013, years in which these additional changes would have at least partially taken effect. This is not meant to imply that admission criteria are the only important parts of pass rate improvement plans. Rather, directors should carefully review all aspects of their programs and only include those factors anticipated to have the most meaningful impact on the pass rate.

The 2017 standards will primarily hold programs accountable to the one year pass rate, which may alleviate some of the challenges identified above. ACEND decided to institute this change since programs typically have an easier time meeting the one-year pass rate and because a one year pass rate is used to assess programs for other health professions. For instance, Occupational Therapy, Physical Therapy and Speech Language Pathology all monitor one year pass rates as opposed to first time pass rates on their respective credentialing exams. Nonetheless, pass rate monitoring will continue to be an important means of program assessment. However, DP directors must be aware that the process of pass rate improvement is a slow one, and it may take several years for changes to become effective, particularly if pass rate improvement plans involve changes to admission criteria.

Table 3. Average Program Pass Rates Prior to and Following Admission Criteria Change

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students Taking the Exam</th>
<th>Number of Students Passing on the First Attempt</th>
<th>First-Time Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass rate 2004-2013</td>
<td>96</td>
<td>71</td>
<td>73.95%</td>
</tr>
<tr>
<td>Pass rate 2014-2015</td>
<td>22</td>
<td>18</td>
<td>81.81%</td>
</tr>
<tr>
<td>Pass rate 2014-2015*</td>
<td>21</td>
<td>18</td>
<td>85.71%</td>
</tr>
</tbody>
</table>

*Pass rate excluding student admitted under prior admission criteria
References

As 90% of hospital leaders interviewed by the 2014 Telemedicine Survey are currently developing or implementing a telemedicine program¹, it is no surprise that nutrition care is following suit. In fact, the Academy of Nutrition and Dietetics identified a shift towards technology based nutrition services as a driving force impacting the dietetics workforce in their future scan of the years 2012-2022². With the rising prevalence and patient interest in telehealth, it is important that dietetic interns be competent in utilizing technology in their future practice. The Iowa State University Dietetics Internship, in conjunction with One Medical Group and the Partnership for a Healthier America, is providing interns with a first of its kind experience to coach low-income families via the Rise smartphone app³.

To prepare for the coaching experience, nine interns completed 12 weeks of training with One Medical Group. During this time, interns learned how to effectively coach using the app, practiced communication over various digital platforms, and applied motivational interviewing techniques. The following 12 weeks were dedicated to coaching clients with daily feedback on their meals and exercise and answering clients’ questions. After completing several weeks of coaching, interns were surveyed using a likert scale (with 0 being the lowest and 5 being the highest possible score) and free comment fields to evaluate the effectiveness of the Rise training in the following areas: application of motivational interviewing, navigation of the app to provide nutrition coaching, and ease of communication.

Motivational interviewing (MI) is a technique that has been found to be effective at improving health behavior change and health outcomes. It is described as a client-centered method to increase internal motivation by exploring and resolving ambivalence⁴. Interns completing the Rise training independently studied Molly Kellogg’s Dietetic Intern’s “Step by Step” program and applied counseling skills from each lesson in weekly video conferences. A survey of the interns revealed that 86% found the Molly Kellogg trainings to be at least moderately helpful at advancing their understanding and application of MI strategies. Interns found the segments focusing on “rolling with resistance” and “engaging the client” most helpful, while the topics of “open ended questioning” and “reflection” were least helpful. Comments suggested interns learned about open ended questioning and reflection during their undergraduate studies, and they found these segments of the Molly Kellogg trainings to be repetitive. Several of those surveyed felt they gained the most from the weekly video conferences during which they were able to practice MI concepts. Interns also commented that during the video conferences, discussions that were more structured and focused on applying MI within the Rise app would be helpful to future interns.

Training on app navigation from both a client and coach standpoint was also an important component of the first 12 weeks of training. Interns
were paired and adopted both the role of the client and the coach to give each intern the opportunity to become comfortable with operating the app and its features. To evaluate functionally, interns were then asked to rate user friendliness from the coaching and client standpoint. Results indicated the app was more user friendly from the client side, but interns still felt well prepared to coach after the app navigation training was complete. Interns offered suggestions to improve the coaching interface including navigational changes when looking at clients’ meals and alterations in the meal notification feature.

Effective communication among the interns and Rise personnel was an essential component of the Rise training. It was a unique challenge due to the varying geographical locations of those involved. The communication tools used included Zoom, Slack, and Google Docs. Zoom is a video conference platform used for online meetings that allowed the interns, a Registered Dietitian Nutritionist, and Rise representatives to communicate through audio and video. The survey indicated interns found Zoom was “easy to use” and it was “beneficial to be able to communicate one-to-one with everybody”. One negative comment related to zoom was that “typing could be heard over the speaker if the mic was not muted”. The second communication tool used, Slack, is a messaging app specifically designed for group communication. The majority of interns rated Slack as easy to use. Lastly, Google Docs was used for online document sharing. The survey revealed that interns felt it was hard to keep track of the multitude of Google Docs that were created. An additional communication tool that could be introduced to future Rise coaches and interns is youcanbook.me. Youcanbook.me is an online scheduling assistant that could be used to plan phone conversations with clients. Overall, the interns were pleased with the tools used to communicate among themselves, the Registered Dietitian Nutritionist, and the Rise representatives.

The 12 week training led interns to feel exceptionally prepared to provide clients with positive and constructive feedback. By providing comments and tips to clients, Rise interns gained confidence in their coaching abilities and developed positive relationships with their clients. According to the survey 86% of interns reported the 12 weeks of training prepared them to be successful coaches. One respondent noted that practicing with another intern was helpful to become familiar with a client’s perspective of Rise. By practicing with each other, interns felt better equipped to navigate real client situations in the future. When asked about how the training prepared coaches to respond to cultural and ethnic foods, 71% of interns felt this area was lacking. Interns commented they wished the training would have included more ethnic foods and addressed resources for evaluating the nutrition of these foods.

This training opportunity provided interns with a first of its kind experience to coach clients via the Rise smartphone app. The training included application of motivational interviewing, navigation of the app to provide nutrition coaching, and communicating over various digital platforms. While potential areas of improvement exist, there were many positive aspects of the training. Interns reported improvement in motivational interviewing ability and increased confidence in utilizing technology in health promotion. Current and future Rise interns will be exceptionally prepared for the emerging trend of telehealth in the dietetic field.

Acknowledgements: Thank you to following interns, Jessica DaSilva, Helen Bernadt, Sonja Ouimet, Kaitlyn Scheuermann, and Emmaline Wright, who participated with Rise clients. Thank you to dietetic internship faculty for their support with this project, Erin Bergquist, MPH, RD, CNSC, LD; Alison St. Germain, MS, RD, LD; and Tonya Krueger, MA, RDN, LD. Special thanks to One Medical Group and Partnership for a Healthier America for collaboration on this project.

References


Rise is a mobile application that allows coaches and clients to connect daily to work towards healthy lifestyle changes.
Change in Implicit Weight Bias Scores following a Multi-Faceted Bias Education Session in Undergraduate Nutrition Students and Dietetic Interns

Elizabeth Tenison, MS, RDN, CSP, CNSC
Riva Touger-Decker, PhD, RDN, FADA, CDN
Rutgers, State University of New Jersey, School of Health Professions, Department of Nutritional Sciences
Et307@shp.rutgers.edu
860-231-5254

INTRODUCTION

Obesity is reaching epidemic levels in the U.S. According to the 2011-2012 National Health and Examination Survey, approximately 35% of adults and 17% of youths are clinically obese. Individuals who are obese are more likely to develop cardiometabolic diseases when compared to individuals with normal weight, including type 2 diabetes mellitus, hypertension, cardiovascular disease and atherosclerosis. Weight loss is a part of comprehensive lifestyle changes to reduce cardiometabolic risk factors. Successful achievement of weight reduction among individuals may require intervention by a health professional. Bleich et al studied non-physician health professionals to identify which discipline was most qualified to provide weight management counseling and found that nutrition professionals (RDNs) were determined as best suited. However, health professionals including RDNs, need training for appropriate management of weight loss interventions in the individual with obesity.

Research regarding weight stigma in healthcare suggests that health professionals perpetuate stereotypes regarding patients who are overweight and obese. Puhl, Swift, Digiancinto, Berryman, Welborn, Schwartz, O'Brien and Peterson found physicians, physician assistants, RDNs, nurses, mental health workers and physical education professionals, as well as students in these professions, experience weight bias. Puhl, Swift, Berryman, Welborn and Schwartz studied weight bias among practicing RDNs and dietetics students; their scores reflected the same obesity stereotypes as other health care professionals. Prior research has demonstrated that across the health professions there are beliefs that individuals who are obese are lazy, less attractive, less compliant and more depressed. Schwartz and Tomiyana explored the relationship between age and BMI and expression of weight bias among physicians, dietitians, psychologists and pharmacologists who specialized in the treatment of persons with obesity. The results indicated that the strongest implicit bias was held by younger participants. Participants who self-reported their weight as “normal” expressed more negative attitudes toward individuals who were obese than participants who self-reported their weight as “overweight.”

Puhl et al examined attitudes and beliefs of graduate students in physician assistant, psychology, medicine and psychiatry programs regarding the medical management of a patient who is overweight or obese. The researchers found student trainees viewed this patient population as difficult to counsel, lacking motivation and demonstrating non-compliance. Students who held the strongest weight bias expressed the greatest frustrations in the care and treatment of individuals with obesity. Swift et al used the Fat Phobia and Beliefs about Obese People (BAOP) scales to explore weight bias among dietetic, medical and nursing students. They reported that similar negative attitudes toward obesity existed among these student groups. Puhl’s and Swift’s studies suggest that bias awareness training with nutrition and dietetic students is warranted.

Weight bias education is needed for students at all levels of the health professions curricula. The present study aimed to expand the work of Swift, Poustchi and O’Brien by assessing weight bias with three different scales among undergraduate nutrition students and dietetic interns. In an effort to explore attitudes about weight bias among undergraduate nutrition students and dietetic interns, this study sought to determine implicit bias before and after a multifaceted education intervention in the classroom. The primary aims of this retrospective study were to assess the changes in implicit weight bias scores on the BAOP (Beliefs...
About Obese Persons Scale), ATOP²⁴ (Attitude Toward Obese Persons Scale) and DBS²⁶ (Dieting Belief Scale) among undergraduate nutrition students and dietetic interns from before to after a session on weight bias among health professionals. The BAOP²⁴ measures the extent of belief that obesity is caused by lack of personal control, the ATOP²⁴ measures attitudes and perceptions toward persons with obesity and the DBS²⁶ measures locus of control.

**METHODS**

**Study Design and Participants**

This study was a retrospective analysis of data collected at the University of Saint Joseph. The research protocol was approved by the Institutional Review Boards (IRB) of the University of St Joseph (original study protocol) and Rutgers University (current study protocol).

Participants were students enrolled in an undergraduate medical nutrition therapy course (n=20) and a dietetic internship course (n=28) taught by the Principal Investigator (PI). All participants completed a demographic questionnaire which included questions about age, student group, height and weight and the three implicit weight bias scales (BAOP Scale²⁴, ATOP Scale²⁴ and DBS²⁶) to determine beliefs toward individuals with obesity. All instruments were coded with unique identifiers for the purpose of matched pairs analyses.

The week after the students completed the scales, both groups of students participated in a multi-faceted weight bias education session taught by the PI. The education session included professionally prepared weight bias awareness training videos entitled: “Weight Prejudice: Myths and Facts” and “Weight Bias in Health Care”²⁷ as well as a group discussion led by the PI exploring questions provided by the Rudd Center for Food Policy and Obesity.²⁷ Participants engaged in a dialogue that included personal experiences of bias and observation of bias expressed by family members, co-workers, instructors and other health professionals. At the conclusion of the session, the same three scales (BAOP Scale²⁴, ATOP Scale²⁴ and DBS²⁶) were completed by participants and placed in envelopes labeled with their unique identifiers and sealed.

**Outcome Measures**

The BAOP²⁴ uses eight Likert scale questions which assess beliefs about the underlying causes of obesity.²⁵ BAOP scores range from 0 to 48 with a higher score indicating a stronger belief that obesity is driven by genetic factors as opposed to lack of self-control in the individual.²⁵ The ATOP²⁴ includes 20 Likert Scale questions that measure perceptions and attitudes about individuals with obesity. ATOP scores range from 0 to 120 with a higher ATOP score reflecting more positive attitudes about individuals with obesity.²⁴, ²⁵, ²⁶ The DBS²⁶ has 16 Likert Scale questions focused on the locus of control. On the DBS instrument, higher scores indicate a belief that weight is controlled by one’s own behaviors and the locus of weight control is internal. Scores for DBS use a reference range of 45 to 86.²⁶ No score parameters were defined for the degree of positive or negative association by the authors of the BAOP, ATOP or DBS scales.

**Data Analysis**

The data were entered into SPSS v22.0 (2014 IBM Corporation, Armonk, New York) and analyzed by the PI. Assumptions of normality for parametric tests were met. Descriptive statistics were calculated for the demographic characteristics, age and self-reported BMI. Total scores were calculated for the pre- and post- BAOP, ATOP and DBS scales. Paired t-tests were used to analyze changes in implicit bias scale scores from pre to post education intervention. Based on prior research by Schwartz¹⁶ and Tomiyana²² which supported relationships between age, weight and scale scores, Pearson’s product moment correlations were used to analyze relationships between pretest bias scale scores and age and BMI. The a priori alpha was set at p≤ 0.05 for all statistical analyses.

The hypotheses tested were that there would be significant increases on the BAOP²⁴ scale scores from pre- to post- intervention (higher score indicates obesity is not under one’s control) and significant increases in the ATOP²⁴ scale scores from pre- to post- intervention (higher score indicates a more positive attitude toward persons with obesity). The third hypotheses was that there would be a significant decrease in the DBS²⁶ scale score from pre- to post- intervention (higher scores indicate the locus of control is internal).

**RESULTS**

All three scales were completed at both time points by all 48 participants. Demographic characteristics
are outlined in Table 1. The mean age of the participants (n=48) was 26.7 years (SD =7.5) and mean BMI (n=47) was 23.9kg/m² (SD = 5.4).

Scale data are reported in Table 2; paired t-tests were used for all analyses. The mean BAOP and ATOP scores increased significantly from pre to post test (mean changes = 10.62 and =6.63, respectively) (p ≤ 0.001 and =0.019, respectively). The mean DBS score decreased significantly from pre to post test (mean change = 6.62, p ≤ 0.001).

Table 1. Demographic Characteristics: Age and BMI

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Group</th>
<th>Mean (±SD)</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td>Undergraduate</td>
<td>27.14±9.10</td>
<td>24.0</td>
<td>20.00-60.00</td>
</tr>
<tr>
<td></td>
<td>Dietetic intern</td>
<td>26.10±4.57</td>
<td>25.0</td>
<td>22.00-38.00</td>
</tr>
<tr>
<td></td>
<td>Total (n=48)</td>
<td>26.70±7.52</td>
<td>24.5</td>
<td>20.00-60.00</td>
</tr>
<tr>
<td>BMI</td>
<td>Undergraduate</td>
<td>23.11±4.39</td>
<td>21.8</td>
<td>12.07-32.99</td>
</tr>
<tr>
<td></td>
<td>Dietetic intern</td>
<td>25.14±6.59</td>
<td>24.46</td>
<td>19.78-50.03</td>
</tr>
<tr>
<td></td>
<td>Total (n=47)</td>
<td>23.93±5.42</td>
<td>22.93</td>
<td>12.07-50.03</td>
</tr>
</tbody>
</table>

SD= Standard Deviation
BMI= Body Mass Index

Table 2. Pre and Post Test Paired Weight Bias Scale Scores

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
<th>SD±</th>
<th>Range</th>
<th>pValue (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreBAOP(^a)</td>
<td>18.10</td>
<td>5.44</td>
<td>8.00-31.00</td>
<td>p≤0.001</td>
</tr>
<tr>
<td>PostBAOP</td>
<td>28.63</td>
<td>7.99</td>
<td>7.00-47.00</td>
<td></td>
</tr>
<tr>
<td>PreATOP(^b)</td>
<td>63.04</td>
<td>15.30</td>
<td>32.00-96.00</td>
<td>p=0.019</td>
</tr>
<tr>
<td>PostATOP</td>
<td>69.67</td>
<td>13.91</td>
<td>41.00-101.00</td>
<td></td>
</tr>
<tr>
<td>PreDBS(^c)</td>
<td>64.42</td>
<td>7.69</td>
<td>52.00-90.00</td>
<td>p≤0.001</td>
</tr>
<tr>
<td>PostDBS</td>
<td>57.60</td>
<td>8.51</td>
<td>42.00-76.00</td>
<td></td>
</tr>
</tbody>
</table>

SD= Standard Deviation
\(^{a}\)BAOP Scale -higher scores indicate beliefs that obesity is not controllable.\(^{23}\)
\(^{b}\)ATOP scale -higher scores reflect more positive attitudes about individuals with obesity.\(^{23}\)
\(^{c}\)DBS - higher scores indicates a belief that the locus of control is internal\(^{24}\)
\(^{d}\)paired-t-test
DISCUSSION

The hypotheses explored that there would be significant increases in the BAOP and ATOP scores and significant decreases in the DBS implicit weight bias scores would change significantly from pre to post intervention in the sample of undergraduate nutrition students and dietetic interns were supported. The findings of this study are consistent with findings reported by others.17, 27,30 Poustchi et al 27 and Swift et al30 utilized bias awareness videos from the Rudd Center for Food Policy and Obesity27 in pretest posttest education intervention studies with graduate dietetic students and second and third year medical students, respectively. Both found significant increases in the mean implicit BAOP bias scores from pre to post intervention. In a randomized controlled trial, O’Brien et al17 conducted a 1 hour per week, 12 week education intervention with three study arms (alcohol in youth, diet and physical activity in obesity and genes and the environment in obesity) among students enrolled in an undergraduate public health program. Implicit bias was measured using the BAOP and DBS scales pre and post intervention. The results revealed a significant increase in BAOP bias scores in the treatment group “diet and physical activity in obesity”, but no significant differences in the other treatment groups. A significant decrease in mean DBS scores was reported for the three treatment groups.17

The pretest BAOP scale answers among participants in the present study supported beliefs that obese people have a lack of willpower, simply eating more than non-obese people without a biological component to obesity. Following the intervention, posttest BAOP scale scores increased significantly. Higher mean BAOP scores post intervention suggest that participants believe that obesity is not under an individual’s control.24 Pretest ATOP scale answers reflected negative attributes such as obese people are not as happy or not as successful as those who are not obese. Higher mean ATOP scores indicate participants held more positive attitudes toward individuals with obesity. 24 The pretest DBS answers reflected attributes of internal locus of control. The significant decrease at posttest reflects attributes of external locus of control. The lower mean DBS score post intervention suggests that participants were less likely to believe a person’s behaviors control weight and more likely to believe obesity is caused by outside factors such as genetics or environment.26 -

The bias awareness intervention used in this pilot study represents one approach to weight stigma education. Weight bias reduction interventions may be classified as interventions that focus on obesity causality and controllability, empathy or social consensus techniques to reduce weight bias expression.32, 33 The pedagogy includes lectures, videos and written materials to address the complex etiology of obesity and increase the students’ understanding that obesity may be outside of an individual’s control, considering genetic and biological factors.12, 17

The limitations of this study include the lack of a control group and the use of a small convenience sample from a single institution. The small sample size limits generalizability as well. The strengths of the study include the use of three validated implicit bias scales to determine change in bias. Student engagement using a combination of videos, written material and verbal discussion was high. They were able to engage in a dialogue about weight bias in health professionals. Participants in this study, who served as their own controls, experienced a change in implicit bias expression as measured by the scores on three different scales.

CONCLUSIONS

The primary aims of this study, to determine the changes in implicit weight bias scores (BAOP, ATOP and DBS) among undergraduate nutrition students and dietetic interns following a multifaceted education session on weight bias were achieved. The results revealed significant changes in mean scores from pre to post intervention among undergraduate nutrition students and dietetic interns who participated in a bias awareness intervention. These changes reflected a reduction in the implicit weight bias expressed among this sample of undergraduate and graduate students.

IMPLICATIONS

The results of this study support the need for further research regarding weight bias education among dietetics students. Future studies may benefit from inclusion of a control group in a randomized controlled trial with a larger sample size from multiple colleges and universities. Addressing weight bias in dietetics education can help prepare future practitioners to provide appropriate nutrition intervention and treatment for persons with obesity. Exploring effective pedagogy on expression of weight bias among
undergraduate nutrition students and dietetic interns is indicated.

References


Simulation within Dietetics Education: How Educators’ Familiarity and Needs Have Changed with Increased Simulation-Related Efforts

Brittney Patterson, MS, RD
Department of Nutrition, Food Science & Packaging
San José State University
Kasuen Mauldin, PhD, RD, Assistant Professor, Department of Nutrition, Food Science & Packaging
San José State University
kasuen.mauldin@sjsu.edu
(408) 924-3109

INTRODUCTION
Simulation is an educational method in which students learn by doing in an environment that is set up to mimic various aspects of the real world. One advantage of the hands-on learning in simulated environments is mistakes will not cause harm. Prior to going through the simulation experience, students receive objectives and goals to accomplish during the scenario. Technology within simulation environments can range from low- (eg, peer-to-peer), medium- (eg, computer-based), and high-fidelity (eg, realistic hospital room with life-size instructor-manipulated mannequin). The overall goal is to “suspend disbelief” to promote realism within the experience to solidify learning. Afterward, a debriefing session is held with the students, teachers, and observers to analyze the experience.

The history of simulation is far-reaching, with substantial adoption in military, space, aviation, and nuclear power industries. Medical simulation started with the use of anatomical models centuries ago, and since the 1960’s there has been an increase in use within various healthcare fields. Research among nursing, pharmacy, and dentistry students have found simulation to be an effective learning tool. Even with sound research backing up the ideology, the implementation of a new teaching modality can present challenges in the forms of cost, time, and lack of support from department heads.

Over the past few years, there has appeared to be a surge in interest and support for using simulation within dietetics education. One such example is the seminal article by Thompson and Gutschall which provided a step-by-step framework for dietetic educators to start developing and using simulation. The primary purpose of this study was to determine if and how simulation needs of dietetic educators have changed in accordance with the simulation-related efforts between academic year (AY) 2012-2013 and AY 2015-2016. The secondary purpose was to assess if dietetics educators would be interested in online simulation resources.

MATERIALS AND METHODS
To assess dietetic educator demographics, barriers, needs, and desires for online resources, an anonymous 8-question “simulation needs assessment” survey was created. The survey was first distributed among educators at a 2013 Food and Nutrition Conference and Expo (FNCE) talk regarding simulation. All attendees were eligible to participate in the voluntary survey. The same survey was distributed via listserv email to the Nutrition and Dietetics Educators and Preceptors (NDEP) practice group in January 2016. NDEP participants were directed to the survey online that was hosted through Qualtrics.

Three methods were employed to quantify simulation-related efforts within dietetics. First, publications on ScienceDirect between AY 2012-2013 (ie, June 1, 2012 - May 31, 2013), AY 2013-2014, AY 2014-2015, and AY 2015-2016, were searched for the terms “dietetics” and “simulation”. Second, the 2012-2015 FNCE programs were audited for simulation-related presentation and posters. Third, the Academy of Nutrition and Dietetics (AND) webpages regarding simulation were reviewed for grants, funding, and standards. Since the survey was distributed to two different groups, averages, frequencies, and percentages were completed in order to compare
results. Surveys that were incomplete were not included in the final analysis. All data collected for the quantification of simulation-related efforts was tallied, with final counts for each year documented. This study was deemed exempt by the San José State University Institutional Review Board.

RESULTS
Survey Results
From the 2013 survey group, a total of 112 surveys were collected, with 111 completed. From the 2016 survey group, a total of 105 were collected, with 100 completed. The demographics between the 2013 and 2016 respondents were similar (Table 1). The majority were educators and Dietetic Internship (DI) Directors and were associated with a Didactic Program in Dietetics, DI, or a coordinated program.

The familiarity of educators regarding simulation increased between 2013 and 2016 (Table 2 and Figure 1).

The biggest barriers in 2013 were time, cost, and lack of facilities; whereas 2016 responses were lack of facilities, cost, and "not sure how to start using simulation" (Figure 2). In both 2013 and 2016, the first and third requested resources were already created scenarios and a list of simulation resources, respectively. A change was seen with the second requested resource: templates to create your own simulation scenarios (2013) vs. assessment tools (2016) (Table 3). Regarding online resources, respondents in 2013 were more likely to want to use and pay for such resources compared to 2016 (Table 4).

<table>
<thead>
<tr>
<th>Status(^{a})</th>
<th>2013 (n=111)</th>
<th>2016 (n=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educator</td>
<td>84 (60%)(^{b})</td>
<td>62 (53%)</td>
</tr>
<tr>
<td>DI Director</td>
<td>29 (21%)</td>
<td>26 (22%)</td>
</tr>
<tr>
<td>Preceptor</td>
<td>4 (3%)</td>
<td>11 (9%)</td>
</tr>
<tr>
<td>Practicing RD/RDN or DTR</td>
<td>5 (4%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Student/Intern</td>
<td>2 (1%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Other</td>
<td>15 (11%)</td>
<td>14 (12%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Training Program(^{a})</th>
<th>2013 (n=111)</th>
<th>2016 (n=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>10 (8%)</td>
<td>6 (5%)</td>
</tr>
<tr>
<td>DPD</td>
<td>40 (32%)</td>
<td>45 (38%)</td>
</tr>
<tr>
<td>DI</td>
<td>40 (32%)</td>
<td>45 (38%)</td>
</tr>
<tr>
<td>Coordinated Program</td>
<td>18 (15%)</td>
<td>15 (13%)</td>
</tr>
<tr>
<td>Other</td>
<td>16 (13%)</td>
<td>8 (7%)</td>
</tr>
</tbody>
</table>

a. More than one category could be selected.

b. Number of responses (% out of the total number of responses).

<table>
<thead>
<tr>
<th>Familiarity</th>
<th>2013 (n=111)</th>
<th>2016 (n=100)</th>
<th>Change between 2013 and 2016(^{a})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very familiar</td>
<td>6</td>
<td>19</td>
<td>14%</td>
</tr>
<tr>
<td>Somewhat familiar</td>
<td>46</td>
<td>49</td>
<td>8%</td>
</tr>
<tr>
<td>Not very familiar</td>
<td>38</td>
<td>25</td>
<td>-9%</td>
</tr>
<tr>
<td>Not at all familiar</td>
<td>21</td>
<td>7</td>
<td>-12%</td>
</tr>
</tbody>
</table>

Figure 1. Percentage of familiarity between 2013 and 2016 survey respondents.
Figure 2. Top barriers to implement simulation reported by 2013 and 2016 survey respondents.

a. Up to three choices could be selected.
b. Other responses include: large number of students, collaboration with Nursing departments, unsure of efficacy.

Table 3. Top three requested resources to develop simulation reported by 2013 and 2016 survey respondents.

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Already created simulation scenarios</td>
<td>Already created simulation scenarios</td>
</tr>
<tr>
<td>2</td>
<td>Templates to create your own simulation scenarios</td>
<td>Assessment tools</td>
</tr>
<tr>
<td>3</td>
<td>List of simulation resources for educators</td>
<td>List of simulation resources for educators</td>
</tr>
</tbody>
</table>
Table 4. Change in likelihood to use and pay for an online simulation resource between 2013 and 2016 survey respondents.

<table>
<thead>
<tr>
<th></th>
<th>Use an online resource</th>
<th>Pay for an online resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very likely</td>
<td>-12%</td>
<td>-19%</td>
</tr>
<tr>
<td>Somewhat likely</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Not very likely</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Not at all likely</td>
<td>1%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Simulation-Related Efforts Results

Since AY 2012-2013 there has been a steady increase in simulation-related publications. The audit of FNCE presentations and poster sessions revealed that simulation-related topics were regularly discussed at the conference between 2012-2015. Additionally, adjunct the FNCE conferences, a tour of the Texas Children’s Hospital Simulation Center was offered in 2013 and a 4-hour simulation workshop was available in 2015. Review of the AND webpages showed monetary support, and changes in standards for incorporation of simulation into curriculum. Specifically, a $200,000 grant in 2013, a $54,000 fellowship in 2014, and release of the “Draft 2017 Accreditation Standards” by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) in 2016 which proposed to allow simulation in supervised practice (Figure 3 and Table 5).

Figure 3. Simulation-related efforts over the last four academic years.

   a. See Table 4 for chart source data of information.
   b. AND Support noted as single values (1).
Table 5. Simulation-related efforts over the last four academic years.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Publications a</td>
<td>16</td>
<td>28</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>FNCE Posters</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>FNCE Presentations</td>
<td>1</td>
<td>5 b</td>
<td>1</td>
<td>3 c</td>
</tr>
<tr>
<td>AND Support</td>
<td>$200,000 grant</td>
<td>$54,000 fellowship</td>
<td>ACEND Standards d</td>
<td></td>
</tr>
</tbody>
</table>

a. ScienceDirect search.
b. Included a tour of the Texas Children’s Hospital Simulation Center.
c. Included a 4-hour workshop.

DISCUSSION
Dietetic educators are becoming more familiar with simulation over time. The monetary and standards support from AND are likely the most crucial reasons for this rise. ANDs financial and policy stimulus not only benefit the educators directly, but also indirectly through increased publications and topics presented at FNCE. It is through many of these ancillary paths that educators are able to familiarize themselves with up and coming topics in the dietetic realm. Overall, educators are more likely to familiarize themselves with simulation modalities when there is additional support.

A shift in barriers and needs among dietetic educators occurred between the 2013 and 2016 survey. Lack of facilities became a top barrier among the 2016 survey group. Simulation is a technique that can involve varying technological levels of fidelity, with the high-fidelity environments requiring ancillary staff, large facilities, and can cost millions of dollars to implement and maintain. The low- and medium-fidelity environments can include peer-to-peer, unfolding case studies, standardized patients, and computer-based simulation scenarios, which require minimal space and money to implement. The use of a high-fidelity environment may appear to be ideal to apply simulation education, but research has shown that no statistical difference in learning outcomes between low- versus high-fidelity environments. Also, many of the skills dietitians use do not require high-fidelity environments. Specifically, practicing communication skills, interdisciplinary team interaction, counseling techniques, critical thinking, and improving confidence can all be achieved in low- and medium-fidelity simulations. The lower cost associated with low- and medium-fidelity environments also addresses the consistent barrier of cost reported between survey groups. Further, the top requested need from both survey groups was already created simulation scenarios. Creating low- and medium-fidelity dietetic simulations, which could be easily shared among educators, would address the rising barrier of lack of facilities, consistent cost barrier, and the need for already made scenarios.

Assessment tools took precedence in the 2016 group as a top requested resource. Debriefing, a form of assessment, is the cornerstone of simulation learning, wherein students process and analyze their own performances. In a study assessing multiple simulation centers across Europe, all respondents reported that debriefing was the most crucial part of the simulation process. As dietetic educators became more familiar with simulation, the need for
assessment tools understandably became a priority.

As reported by ACEND, demand for dietetic internships is increasing despite the lack of additional internship sites. In April 2009 matching, there were double the applications as there were sites available to take dietetic interns. This competitiveness is not unique to the dietetics field and has been seen in various other healthcare fields, specifically nursing. According to Jeffries, nursing research has shown the possibility that the majority of clinical learning will be done through simulation training. Given the updated standards support by AND, it is possible to see how simulation could aid in alleviating the pressure of a lack of internship sites.

The desire to use and pay for online resources decreased over time despite the reported need for a list of simulation resources as a top request among both groups. This decrease could have been associated with the different methods of survey disbursement. The 2013 group received a paper copy of the survey whereas the 2016 group took the survey online. The online survey method could have inadvertently targeted educators who may have been more familiar with searching for information online. Regardless of the change in desire for online resources, there still appears to be a need for dissemination of simulation resources to dietetic educators.

Limitations of the research included the decreased generalizability of the data, given the different survey methods and study groups used. Also, it was not asked within the survey how educators became familiar with simulation and if they were currently using this teaching modality. This information could have furthered our understanding if familiarization with simulation was resulting in actual implementation.

The core strength to the research is that currently, no other study has looked at change over time of dietetic educators’ simulation familiarity and needs. Additionally, both survey groups had large sample sizes. Overall, this study provides a snapshot of the barriers and needs regarding simulation within the dietetic educator community.

CONCLUSION

Between AY 2012-2013 and AY 2015-2016, dietetic educators’ familiarity has increased and needs are changing with the rise in simulation-related efforts. Future research and support by AND needs to address these reported needs to allow for cohesive incorporation of simulation within curriculum to meet 2017 ACEND standards.

ACKNOWLEDGEMENTS

The authors would like to thank the Circle of Friends Research Scholarship Award from the Department of Nutrition, Food Science, and Packaging at San José State University for partially funding this research.

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21. Jeffries PR. Dreams for the future for clinical simulation: Research and development in this hot topic area will lead to more sophisticated manikins and robots possessing even more realistic features and functionality. What is known as the high-fidelity simulator today will look simplistic when compared to the next generation of simulators in the years to come. *Nurs Educ Perspect*. 2009; 30:71-72.
2016 Outstanding Preceptor Awardees

At the NDEP Member Breakfast at FNCE in Boston, seven Outstanding Preceptors were recognized by NDEP with a 2016 Outstanding Preceptor Award. Sylvia Escott-Stump, NDEP Past-Chair, had the pleasure of presenting six of the seven awardees with a certificate. In addition to their certificate, each received $1000 from the Academy Foundation to attend FNCE.

**Area 1:**
Anne Goetze, RD, LD, FAND, Senior Director of Nutrition Affairs, Oregon Dairy and Nutrition Council, Portland, OR, was nominated by Sara Wilson Wolfe, MS, RD.
**Area 2:**
Kristin Cunningham, RD, LD, dietitian with BJC School Outreach and Youth Development, Saint Louis MO, was nominated by Camille Smith, RD, LD, dietitian with BJC School Outreach and Youth Development.

**Area 3:**
Lynn Thomas, RD, LD, CSG, Director of Dietary Services, NHC Healthcare Lexington, West Columbia, SC, was nominated by Courtney, Lee, MS, RDN, LD, CFCS, dietitian with NHC Healthcare Lexington.
**Area 4:**
Katie Braun, MS, RD, LD, CNSC, Clinical Nutrition Specialist, Michael E. DeBakey VA Medical Center, Houston, TX, nominated by Kristy Becker, MS, RD, LD, CNSC, Director, Michael E. DeBakey VA Medical Center Dietetic Internship.

**Area 5:**
Patricia Prince-Griffin, MS, RDN, LDN, Clinical Dietitian, Memphis VA Medical Center, Memphis, TN, nominated by Jacqueline Roos, MS, RDN, LDN, CDE, Memphis VA Medical Center Dietetic Internship Director.
Area 6:
Kelly Ratteree, MPH, RD, Clinical Research Dietitian, National Institutes of Health, Bethesda, MD, nominated by Merel Kozlosky, MS, RD, Dietetic Internship Director, National Institutes of Health.

Area 7:
Colette Murphy Cole, MS, RD, Community Nutritionist/Dietitian, Trinitas Regional Medical Center, Women’s Health Center, Elizabeth, NJ, nominated by M. Geraldine McKay, RD, Ed.M, Program Director, Rutgers University Medical Center.