

RESEARCH

Open Access



Cultural Humility: How Foodservice and/or Management Educators are Preparing Dietetics Students

Kailey McBride¹, Emily Vaterlaus Patten¹, Tara Pruitt McCormick¹, Emmilee Woodbrey¹ and Nathan Stokes^{1*}

Abstract

Background In order to provide sufficient care to all patients, dietitians must understand and practice cultural humility in the workplace. Dietetic programs are now required to incorporate cultural humility training into their curriculum. The purpose of this study was to identify how dietetics foodservice and/or management educators are addressing cultural humility education in foodservice and/or management courses and understand their attitudes towards teaching cultural humility.

Methods A survey containing both qualitative and quantitative questions was utilized for this study. The study description and survey link were sent to 549 dietetic program directors who then forwarded the link to foodservice management educators in their programs. A total of 89 directors responded and nine were excluded for a final sample of 80 and a response rate of 14.6%. Descriptive statistics were calculated using Statistical Package for Social Sciences (SPSS). The qualitative data were then coded into themes using conventional content analysis.

Results Respondents were from 35 states, one territory, and 73 universities/colleges. Majority were white ($n = 71$, 91.0%), female ($n = 65$, 82.3%), and taught in Didactic Program in Dietetics (DPD) programs ($n = 55$, 66.3%).

Most educators ($n = 78$) indicated that cultural humility has a place in foodservice and/or management education; however, they felt that it is best learned through real-life work settings. Three themes from qualitative responses were: 1) Assignments and techniques employed to address cultural humility in foodservice/management curriculum, 2) Barriers and challenges faced by foodservice/management educators in addressing cultural humility, 3) Pedagogical resources utilized and desired to educate both educators and students on cultural humility.

Conclusions Foodservice and management educators should continue to highlight cultural humility in their course content and seek out resources to help them in their efforts.

Keywords Foodservice, Management, Dietetics education, Cultural humility, Foodservice and management education

Background

According to the United States (US) Census Bureau of 2022 [1], 38.7% of the US population identifies as a race/ethnicity other than Non-Hispanic White. This statistic is projected to increase to 55.7% by 2060 and will likely be reflected in the racial diversity of the workforce [1, 2]. Diversity also refers to differences in ethnicity, gender, sexual orientation, socioeconomic status, age, physical

*Correspondence:

Nathan Stokes

Nathan_stokes@byu.edu

¹ Brigham Young University, 701 E University Parkway, Provo, UT 84602, USA



© The Author(s) 2025. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

abilities and personal beliefs. Comparably, healthcare professionals provide care to a diverse population and research shows that diversity is a core value in healthcare, however, healthcare workers have the same level of implicit bias as the wider population [3, 4]. As a result, the need for cultural humility has become increasingly necessary in healthcare and failure to develop cultural humility can foster inequitable care [5–7]. Similarly, the standards of Healthy People 2030 [8] expressed that the social determinants of health (SDOH) have a major impact on health, well-being, and quality of life and some of which are racism, discrimination, and violence [8]. Without a culturally humble workforce, the quality of patient care will decline [6].

Efforts to increase cultural understanding have been described using different terms including *cultural awareness*, *sensitivity*, *competence*, *humility*, and *competemility*. While all are equally important, the Accreditation Council for Education in Nutrition and Dietetics (ACEND) currently uses the term *cultural humility* in the current standards for dietetics students. As defined by ACEND, cultural humility involves the ability to maintain an interpersonal stance that is other-oriented (or open to the other) in relation to aspects of cultural identity that are most important to the client and requires practitioners to engage in self-reflection and self-critique as lifelong learners.” [9] The shift from cultural competence to cultural humility also recognizes an individual’s expertise on the social and cultural context of their lives [10]. The Academy of Nutrition and Dietetics (AND) [11, 12] uses *cultural humility* in the code of ethics for registered dietitian nutritionists (RDN); therefore, the term *cultural humility* was used in this study [11, 12].

RDNs are an important part of the healthcare system and work with a diverse clientele in a variety of settings including clinical nutrition, community nutrition, management, consultation, and education and research [13]. However, research shows that some RDNs feel inadequate in their ability to work with diverse clients [14]. Two current strategies are being used in dietetics to address issues related to health inequities. First, is to increase diversity in healthcare professions, and second, is to prepare health care professionals to be culturally humble and proficient [6]. Currently, the dietetics workforce is not representative of the racial and ethnic diversity within the US [15]. For this reason, it is imperative that RDNs develop cultural humility to meet the needs of each client regardless of their cultural backgrounds. RDNs also have an ethical responsibility to practice and develop cultural humility to decrease disparities [11, 16].

Research has shown that including cultural humility training in dietetics education led to increased knowledge

and skills including an increase in competence and comfort when working with people from diverse backgrounds [17–20]. ACEND recognizes the value of cultural humility training in dietetics education and created standards and competencies that require all dietetics programs to challenge students to demonstrate increased cultural humility [12]. The current 2022 standards require dietetics programs to surpass cultural exposure and help students develop expertise that enables them to promote health equity [21]. Although some research has been conducted on teaching cultural humility within nutrition education, clinical, and community courses, research related specifically to foodservice and management courses is limited.

Foodservice and management RDNs work in a wide variety of settings that requires them to cater to diverse customer populations [22]. Responsibilities within these roles include customer service interactions, menu planning and employee attraction, selection, hiring, orientation, on-going training, and retention [22]. These responsibilities allow RDNs to create diverse and inclusive work environments while being sensitive to explicit and implicit bias. According to the 2022 Labor Force Statistics from the Current Population Survey, 23% of employees identify as a race other than White [23]. Similarly, the National Restaurant Association indicated in 2022 that 49% of foodservice employees are from racial/ethnic minorities [24]. As RDNs work with and lead people from a variety of backgrounds and cultures, it is critical that they develop cultural humility to minimize bias, racism, inequities, and overall achieve the best outcomes for the populations they serve.

Further research is needed to identify how dietetics students are being prepared to be foodservice and management RDNs in healthcare and other settings. The purpose of this study is to identify how dietetics educators are addressing cultural humility education in foodservice and/or management courses and understand their perceptions of teaching cultural humility.

Methods

Study design

Due to the lack of understanding of how cultural humility is taught in foodservice and/or management courses, both qualitative and quantitative data were collected. Gathering both qualitative and quantitative data helps identify the current demographics of participants by using quantitative methods and the attitudes, beliefs, barriers, and resources of participants using qualitative methods. This approach answers questions that neither qualitative nor quantitative questions could have answered alone [25]. To reach a broader population and reduce respondent burden, an online survey was utilized

[26]. Although average response rates for online surveys range from 20 to 30%, researchers sought to increase participation by including clear instructions, choosing a relevant topic, keeping the survey brief, providing an incentive, and sending repeat reminders to non-respondents [27].

Survey development

The 28-item survey was developed using Qualtrics survey software [28]. Of the 28-items, seven were open-ended and 21 close-ended. The open-ended items prompted educators to reflect on barriers faced when teaching cultural humility, content and assignments currently used in courses, pedagogical resources used related to cultural humility, and resources desired to better educate themselves and their students. The close-ended items included personal (e.g., education, experience, age, gender, race, ethnicity) and program (e.g., program type, ACEND standards used, racial and ethnic groups represented in the program) characteristics and a variety of Likert-type scales. Using Likert-type scales, educators rated their agreement on certain statements about cultural humility in dietetics education, educators' confidence level in discussing specific topics in relation to cultural humility, and the importance of teaching cultural humility in the context of those same topics.

To ensure content validity of the survey instrument, expert reviews were conducted by a panel of four dietetics foodservice and management, survey methodology, and diversity, equity and inclusion (DEI) experts. All expert reviewers were professors from different cultural and racial backgrounds and were contacted via email and invited to conduct an expert review of the survey instrument. The reviewers rated each of the survey items for content appropriateness, importance, and phrasing on a scale of 0 = poor to 10 = exceptional and were able to provide additional comments regarding each item if desired. Based on the feedback received, editorial changes were made to some questions. For example, a clear description of cultural humility compared to cultural competence was given in the introduction of the survey. The feedback also prompted the addition of items to the survey (e.g., ACEND standards used, type of program taught, content/assignments used in courses, why content/assignments have not been included). Experts were offered a \$20 Amazon gift card after completing the review.

Recruitment and data collection

Researchers used purposive sampling to recruit participants and gathered contact information for all program directors ($N=549$) from all types of dietetics programs in the US using publicly available contact information on the ACEND website. At the time this study was

conducted, those programs included Didactic Programs in Dietetics, Future Graduate Model programs, Dietetic Technician Programs, Dietetic Internships, and Coordinated Programs in Dietetics. An email was then distributed to directors in early May 2022, describing the methods and purpose of the study. Directors were asked to forward the email describing the methods and purpose with a link to the survey to faculty members who teach foodservice and/or management courses in their programs. Reminder emails were sent in late May 2022, September 2022, and the final reminder was sent in October 2022. Following completion of the survey, participants were invited to enter their names in a drawing for one of four \$100 Amazon gift cards. This study was deemed exempt by [redacted for review] Institutional Review Board [29]. An implied consent form was used as the first page of the survey. By completing the survey participants indicated their consent to participate. Due to the data collection method, participants were aware of the research purpose through the email invitation and implied consent statement. Interaction was limited to invitations and reminder emails.

Data analysis

Survey data were downloaded from Qualtrics into a Microsoft Excel spreadsheet and were then cleaned and organized. The data were also de-identified by removing recipients' names and email addresses. Finally, eight responses were removed, because respondents did not teach a foodservice and/or management course, and one response was removed due to being incomplete. Following data cleaning, 80 usable responses remained. Because the survey link was forwarded from directors to educators, researchers were unable to identify the number of educators who received the link. Therefore, researchers were unable to calculate an accurate response rate.

Quantitative analysis

One researcher downloaded and cleaned the quantitative data, and a second researcher reviewed the cleaning process to ensure accuracy. The quantitative data was then analyzed using IBM Statistical Package for the Social Sciences (SPSS) software, version 29 [30]. Basic descriptive statistics including frequencies, means, and standard deviations were calculated.

Qualitative analysis

Reflexivity

Prior to data analysis, the researchers ($n=3$) met to discuss potential implicit biases when analyzing the qualitative data. Two of the data analysis researchers identified as White ($n=2$) and one as Hispanic ($n=1$) and all researchers identified as cisgender ($n=2$ women,

$n=1$ man). Two of the researchers teach foodservice and management related courses and one is a graduate student with experience in foodservice and management education. All either attend ($n=1$) or are employed ($n=2$) at a religious university. Bracketing (validating the data collection process by setting aside potential biases) was used to decrease the incident of bias and ensure that the “growing body of knowledge is developed that is faithful to the phenomenon, regardless of the idiosyncrasies of researchers.” [31] For this study, bracketing mainly occurred during the analysis phase as researchers were not working directly with participants’ responses until that point. Data analysis researchers used memos/took notes to be reflexive while working through the qualitative data. They read through the free responses like a novel and noted any thoughts or preconceptions [32].

Content analysis

A conventional content analysis was conducted on the qualitative data. A conventional content analysis was chosen because the study design’s aim was to describe a phenomenon, in this case the barriers and attitudes of foodservice/management dietetics educators. This type of design is appropriate when existing theory or research literature on a phenomenon is limited [33]. For the qualitative analysis, four of the seven open-ended responses were analyzed which addressed content and assignments used to educate students on cultural humility, barriers faced by educators when teaching cultural humility to students, reasons why educators had not included cultural humility in their courses, and pedagogical resources utilized and requested by educators in preparation to teach cultural humility. Two of the other three open ended responses were short answer (courses taught and University) and the third had no responses and therefore were not included in the content analysis. Four of the 80 participants were not included in the qualitative analysis because they did not respond to any of the four questions being analyzed.

To analyze the qualitative data, two researchers individually read through all the responses like a novel. Then researchers individually open coded responses one through 25 by highlighting text and identifying corresponding codes that were initially words or short phrases manually using Microsoft Word. The research team then met together to discuss codes individually identified and developed a codebook to be utilized on the remaining responses. Researchers then individually coded small sections of the free responses, met together to discuss/compare codes and make changes to the codebook according to their discussion. Researchers had a goal of 80% interrater reliability for each round of coding [34]. To calculate the interrater reliability percentage,

the researchers counted the total number of codes and the total number of agreements/disagreements between the coders. They then divided the total number of agreements by the total number of codes to get the agreement percentage. Anytime a set of questions did not reach 80% interrater reliability researchers would discuss differences in codes, adjust the codebook and recode individually. A total of four rounds of coding were completed with an overall interrater reliability score of 83.2%. Once interrater reliability was met for responses to all four open-ended questions, researchers resolved any discrepancies. Once in agreement on all coded responses, researchers then discussed the codes and identified three overarching themes to represent the data.

Results

Sample Demographics

A total of 89 participants responded to the survey and eight participants were excluded due to not being foodservice and/or management educators, and one was excluded for not completing the survey. Following data cleaning, 80 participants were included in the quantitative analysis and 76 were included in the qualitative analysis.

Participants were from 35 states, one territory, and 73 universities/colleges. The majority of participants were White ($n=71$, 91.0%), identified as female ($n=65$, 82.3%), and were 40 years of age or older ($n=60$, 76.0%). The majority ($n=53$, 67.9%) held a master’s degree and taught in didactic programs in dietetics (DPD) ($n=53$, 66.3%). Close to half ($n=44$, 55.7%) taught six credits or more and indicated following the 2022 ACEND standards ($n=42$, 52.5%), while others ($n=33$, 41.3%) indicated following the 2017 ACEND standards. Participants indicated which racial and ethnic groups they felt students in their courses and faculty in their programs represented. Most participants indicated that White ($n=72$, 90%), Hispanic or Latino ($n=62$, 77.5%), Black or African American ($n=52$, 65%), and Asian ($n=50$, 62.5%) groups were represented among students in their courses. When reporting which groups were represented among faculty, the majority indicated White ($n=70$, 87.5%), Asian ($n=26$, 32.5%), and Hispanic or Latino ($n=2$, 2.87%). Racial, ethnic, and gender identity were the only types of diversity reported, due to the difficulty of gathering data on other elements of diversity. See Table 1 for additional demographic information.

Quantitative data

When asked whether “cultural humility had a place in foodservice/management education,” 78 (97.5%) educators indicated “yes” while two (2.5%) indicated that they were “not sure.” Of 80 responses, 53 (66.3%) educators

Table 1 Demographic characteristics of dietetics foodservice and/or management educators ($n = 80$)

	n	% ^a
Credits Taught per Academic Year		
0 credits	5	6.3%
2–3 credits	21	26.6%
4–5 credits	9	11.4%
6+ credits	44	55.7%
Level of Education		
Bachelor's Degree	2	2.6%
Master's Degree	53	67.9%
Doctorate Degree	21	26.9%
Other	2	2.6%
Age		
Less than 30 years old	1	1.3%
30–34 years old	4	5.1%
35–39 years old	14	17.7%
40–44 years old	6	7.6%
45–49 years old	10	12.7%
50–54 years old	14	17.7%
55–59 years old	10	12.7%
60 years or older	20	25.3%
Gender Identity^b		
Female	65	82.3%
Male	13	16.3%
Prefer not to answer	1	1.3%
Hispanic, Latino, or Spanish Origin		
No, not of Hispanic, Latino, or Spanish origin	72	92.3%
Yes, Mexican, Mexican American, Chicano	1	1.3%
Yes, Puerto Rican	2	2.6%
Yes, another Hispanic, Latino, or Spanish origin	2	2.6%
Prefer not to answer	1	1.3%
Racial and Ethnic Identity^c		
White	71	91%
Black or African American	1	1.3%
Korean	1	1.3%
Other Asian	1	1.3%
Other race	2	2.6%
Prefer not to answer	2	2.6%
Type of Program	n	%
Didactic Program in Dietetics (DPD)	53	66.3%
Dietetic Internship (DI)	21	26.3%
Coordinated Program (CP)	18	22.5%
Future Graduate Program (FGP)	14	17.5%
Diet Technician Program	2	2.5%
Other	1	1.3%
Current ACEND Accreditation Standards Followed		
ACEND 2017 Standards	33	41.3%
ACEND 2022 Standards	42	52.5%
Not sure	5	6.3%
Do They Consider the Population they Teach to be Culturally Diverse		
Yes	42	53.5%
No	36	46.2%

Table 1 (continued)^a Percent of responses and not the percent of total participants^b Options also included trans woman, trans man, prefer to self-describe, and prefer not to answer but no responses were given for these options,^c Options also included American Indian or Alaska Native, Chinese, Filipino, Asian Indian, Vietnamese, Japanese, Native Hawaiian, Samoan, Chamorro, and other Pacific Islander, but no responses were given for these options

indicated that they had specific content/assignments for students relating to cultural humility in their courses. Educators also rated their agreement to several statements related to cultural humility and dietetics education on a scale of one to five (1=strongly disagree to 5=strongly agree). Educators agreed most that “Cultural humility is an important part of dietetic education and training in general” ($M = 4.86$, $SD = 0.44$) and “Cultural humility is an important part of foodservice and management training in dietetics education” ($M = 4.80$, $SD = 0.49$). They neither agreed nor disagreed that “Cultural humility is difficult to integrate in a classroom setting” ($M = 3.01$, $SD = 1.27$) and disagreed that “Cultural humility is best learned in a classroom setting” ($M = 2.71$, $SD = 0.92$). However, they agreed that “Cultural humility is best learned through work or volunteer experiences in real world settings” ($M = 4.03$, $SD = 0.84$). (Table 2).

Educators were asked to rate their confidence on teaching specific skills in relation to cultural humility to their students on a scale of one to five (1=not confident at all to 5=extremely confident). Participants felt fairly confident in teaching all the items, but the two skills that educators felt the most confident in teaching were menu planning for special events or single-use menus ($M = 4.24$, $SD = 0.96$) and menu planning of cycle menus ($M = 4.17$, $SD = 0.99$). (Table 3).

Educators were asked to rate the importance of discussing cultural humility in the context of those same skills on a scale of one to five (1=not important at all to 5=extremely important). Educators largely considered cultural humility to be important across many skills, the most important being customer/patient/client service interactions ($M = 4.46$, $SD = 0.84$) and employee selection and hiring ($M = 4.31$, $SD = 0.95$). (Table 4).

Qualitative data

The following three overarching themes were identified from analysis of the open-ended responses: 1) Assignments and techniques employed to address cultural humility in foodservice/management curriculum, 2) Barriers and challenges faced by foodservice/management educators in addressing cultural humility, and 3) Pedagogical resources utilized and desired to educate both educators and students on cultural humility. Additional quotes from participants can be found in Table 5 below.

Table 2 Dietetics foodservice and/or management educators' agreement with factors related to cultural humility and foodservice and/or management education ($n=80$)

Factor	Mean ^a	SD
Cultural humility is an important part of dietetic education and training in general	4.86	0.44
Cultural humility is an important part of foodservice and management training in dietetics education	4.80	0.49
Cultural humility should be a part of foodservice education	4.71	0.56
Foodservice managers should incorporate cultural humility education into their training	4.65	0.55
Foodservice managers are required to accommodate for cultural needs of employees	4.36	0.78
Foodservice managers are required to accommodate for cultural needs customers	4.36	0.89
Cultural humility is best learned through work or volunteer experiences in real world settings	4.03	0.84
I feel equipped to teach cultural humility principles to my students	4.00	0.98
Cultural humility is best learned in a lab/experiential learning setting (quantity foods lab, food science lab, etc.)	3.31	0.98
Cultural humility is difficult to integrate in a classroom setting	3.01	1.27
Cultural humility is best learned in a classroom setting	2.71	0.92

^a Scale of 1 (strongly disagree) to 5 (strongly agree) was used

Table 3 Dietetics foodservice and/or management educators' confidence in discussing cultural humility and its relation to the following skills with their students ($n=80$)

Factor	Mean ^a	SD
Menu planning for special events or single-use menus	4.24	0.96
Menu planning of cycle menus	4.17	0.99
Menu planning of static menus	4.14	1.02
Customer/patient/client service interactions	4.13	1.03
Employee selection/hiring	4.10	1.02
Employee orientation	4.05	1.08
Employee on-going training	4.05	1.07

^a Scale of 1 (not confident at all) to 5 (extremely confident) was used

Table 4 Dietetics foodservice and/or management educators' agreement with the importance of discussing cultural humility in relation to the following skills ($n=80$)

Factor	Mean ^a	SD
Customer/patient/client service interactions	4.46	0.84
Employee selection/hiring	4.31	0.95
Employee on-going training	4.19	1.01
Employee orientation	4.14	0.99
Menu planning of cycle menus	4.01	1.04
Menu planning of static menus	4.01	1.04
Menu planning for special events or single-use menus	3.88	1.04

^a Scale of 1 (not important at all) to 5 (extremely important) was used

Theme 1: Assignments and techniques employed to address cultural humility in foodservice management curriculum.

Educators reported using a variety of assignments and teaching methods to address cultural humility in the classroom. The most frequently used assignments were those related to menus and foods from different cultures.

For example, one participant shared, "I use menu modification assignments that requires students to modify recipes and meals to meet cultural norms and expectations while still promoting health and wellness" (participant 1). Other content mentioned were "communication practices to best enhance communication with diverse individuals" (participant 24), "mini case studies that include culturally diverse scenarios in relation to human resource management" (participant 50), Harvard implicit bias assignments (participant 60), and class discussions.

Some educators reported that cultural humility was normally covered in other courses in their program as indicated by an educator that shared, "that topic is primarily covered in community nutrition" (participant 12). Some discussed that they did not directly address cultural humility in their courses, and some indicated considering content changes in the future to either meet the 2022 standards or to update a course from a previous professor. Some participants indicated that while cultural humility was a discussion point in their classroom, they did not have specific objectives or content prepared. For example, "cultural considerations are woven into any course discussions and assignments, but no specific content in these courses addresses cultural humility" (participant 45).

Theme 2: Barriers and Challenges Faced by Foodservice/Management Educators in Addressing Cultural Humility in Their Courses

Participants indicated that lack of time and resources are two of the greatest challenges faced in addressing cultural humility in foodservice and management education. A participant reported "the course already has a lot of competencies/performance indicators that need to be covered in the program for accreditation" (participant

Table 5 Themes and illustrative quotes identified from open responses of an electronic survey from dietetics foodservice and/or management educators on teaching dietetics students about cultural humility ($n = 79$)**Theme 1: Assignments and techniques employed to address cultural humility in foodservice/management curriculum**

In Human Resource Management we discuss cultural and race issues related to employee selection, orientation, and training. My expectation is that interns have covered similar material in menu planning, as an example. We also discuss Servant Leadership and the impact this concept has on successful interaction with employees and customers. (Participant 79)

I have 40 plus years of experience in leadership positions for food & nutrition services including national, regional and international roles. I share my experiences with students, add historical perspective, view it through Holstede's cultural scales and students' experiences. We have great discussions and lots of ah huh moments. (Participant 52)

Our foodservice management course involves some culinary lab experiences where most cultural competence is assigned including looking at taste, senses, cultural norms, education around social determinants of health incorporated into the culinary labs especially a final project that is based on modified diets, a specific culture, budget, sense perception etc. We discuss throughout the course that nutrition is a science, but food is much much more to all people and how to be sensitive to this. We look at food through a cultural lens in discussions, food safety and norms as well as food/appliance access etc. (Participant 63)

We are planning to improve the content of our courses with the 2022 standards. We are also beginning an FG program in the fall of 2022 and will incorporate content in courses and activities to meet competencies. (Participant 2)

While the topic is addressed, it is not aligned with the specific objectives of the course at this time. However, students participate in fieldwork working with and providing services for people from a wide range of cultural backgrounds. These differences are addressed in many components of the course indirectly. (Participant 64)

Theme 2: Barriers and challenges faced by foodservice/management educators in addressing cultural humility in their courses

The FSM text is very broad but doesn't have a lot of examples focused on this topic. There is also so much information to cover in FSM, it's hard to fit in more. (Participant 32)

I can't possibly have the understanding of all cultures for teaching students about hiring and training employees. (Participant 54)

The largest obstacle I have faced is the lack of diversity in our healthcare settings. Unfortunately, it is a largely elderly white population. Therefore, the skills I teach come from the classroom setting in hope they get the opportunity to employ them in the field. (Participant 1)

Students can have a limited mindset; opening their minds to being fair and non-judgemental about others who are different from them is challenging (Participant 40)

I am thankful that our program is online because we have students from all over the United States. They bring a wealth of diversity and perspective to classes that would not be possible if we were not online. I love seeing or hearing in discussion boards or videos that someone did not consider a topic from their classmate's point of view before, and it changed their outlook. (Participant 60)

Theme 3: Pedagogical resources used and needed to educate both educators and students on cultural humility

I use my personal knowledge of working in this field for several years, something books cannot teach the most important things (Participant 12) mostly used cultural texts (not ideal). Love that the students are asked to do research and present, and actually cook—they land up being a great resource within themselves when it comes to this subject. We try to have a diverse internship group, so the culture is present in discussion all the time. I personally use some resources that AND provide by doing CEUs, webinars, attending FNCE etc., for my own resources. (Participant 14)

We need to provide talented, culturally diverse mentors to increase the number of culturally diverse people we hire and retain. (Participant 17)

I would like to see a specific course offering on cultural humility in dietetics taught by a qualified food and nutrition professional with a team of inter-professional contributions by psychologists, social workers, world culture professionals. There is so much more needed to understand all that goes into regular and modified diets from a cultural perspective and how all this is connected to production, service, coaching, counseling, and compliance. (Participant 47)

I would love to have 10–15-min guest speaker videos that are available to be used for free through the Academy. These guest speakers could discuss their culture, how their culture affects their food choices, and give examples what it means to be culturally humble. I would work those videos into my classes in a heartbeat. I think the students seeing a favorite dish and hearing from people of different cultures would be a fantastic addition to the dietetic curriculum. (Participant 60)

62) while another stated that, “it was difficult to find tools to help us educators feel confident in teaching cultural humility, adequately” (participant 68). Another barrier faced by educators was the lack of diversity or exposure to cultures either among dietetics students, in the general population, or within the profession. A participant shared, “the demographics at our university are not very diverse, so lessons on cultural humility can stray into us learning better how to include them in menus. A more diverse classroom would help because it would be us learning and sharing with each other ideas about how to include all” (participant 61). Some participants shared that they experienced “resistance from students in talking about the subject” (participant 10) while others expressed that students are not as interested in foodservice and/or

management positions. While several barriers were discussed, there were a few participants that felt they did not face any challenges or barriers to teaching cultural humility. For example, one educator shared, “none [barriers]. I've always taught at VERY diverse universities. My students are very aware of and used to incorporating cultural humility” (participant 34).

Theme 3: Pedagogical Resources Used and Needed to Educate Both Educators and Students on Cultural Humility

Educators discussed what pedagogical resources they utilized and desired. They reported having used a variety of resources like “free webinars through ACEND” (participant 9), university trainings and resources, books, and personal experience. Some educators reported that

having diversity within the classroom was seen as a resource, “We have had success with utilizing students/interns from diverse cultures and backgrounds and body sizes who volunteered to share information and serve as a resource for their classmates” (participant 42). However, other participants shared that they do not have any pedagogical resources on cultural humility.

Educators shared that, “the pedagogical resources are limited” (participant 3) and requested, “suggestions on resources that are most effective” (participant 14). Some of the resources requested included “training on navigating difficult issues” (participant 24), Foodservice Management cultural textbooks, case studies, professional presentations, handouts and diagrams, field trips to diverse places, and guest speaker videos. Overall, educators discussed the need for more resources to better educate themselves and their students. For example, one educator wrote, “it would be nice to have some teaching tools that were geared toward cultural humility AND food service. I haven’t found much out there for me to tap into” (participant 68).

Discussion

This study identified the attitudes, beliefs, barriers, and potential resources desired from foodservice and management educators in relation to teaching cultural humility in the classroom. Results showed that almost all educators felt that cultural humility is important in foodservice and management courses, and many include specific content or assignments for their courses. This feeling among dietetics educators is unsurprising because 2022 standards indicate that all programs must teach cultural humility [12]. Those who did not have content or assignments explained that they are planning to make changes to better fit the 2022 standards or are making changes from a previous instructor’s course. Some programs may not have been following the 2022 standards yet, because the study was conducted from May 2022 to September 2022 and programs had to comply by June 2022.

Educators see the value in teaching cultural humility and are adjusting meet the current ACEND standards. However, most educators disagreed that cultural humility is best taught in a classroom setting, they agreed that it is best learned through work or volunteer experiences in real word settings. Interestingly, educators are trying to do more to teach cultural humility, yet feel the topic is best learned outside of the classroom. These efforts could also mean that they desire to teach cultural humility but are not confident in their ability to do so and desire additional training and resources, which is discussed later. Holik [35] found that dietetics students in foodservice and management courses who engaged in experiential learning (EL) activities expressed that EL promoted

better understanding of content materials, created a better environment for the application of theory, and encouraged the development of critical thinking skills. Similarly, Wright and Lundy [20], found that dietetic interns who participated in a study abroad developed cultural awareness, competence and practice. Simons et al. discovered that students who participated in EL (e.g., internships/practicum) improved their multicultural skills due to frequent intercultural interaction during their internship. However, they found that the quality of interracial interaction was more important than the length of the internship. [36] Individual programs could consider whether cultural humility is best taught in the classroom or if it would be better learned during lab-based courses, internships, and other real-life work settings. Although it is not a health care setting, academia is still a major part of the process to becoming a dietitian and learning cultural humility in this setting before entering the “real world” could be extremely beneficial.

The qualitative analysis clearly indicated that educators frequently utilized menu or cultural foods assignments to teach about cultural humility and educators felt the most confident teaching cultural humility in relation to menu planning. However, educators felt menu planning was least important when discussing cultural humility even though these assignments were the most utilized. Although cultural foods and menu assignments are a natural fit for teaching cultural humility and an important skill to have, educators should seek additional ways of teaching cultural humility across these topics [37]. For example, Thornton et al. [21] suggest including discussions of personal experiences and patient-centered care, systemic racism, historical and current oppressions, and health equity. It is also important to note that the use of cultural menus could be seen as a generalization or stereotyping. Cultural humility goes beyond simply labeling a menu item as being “cultural.” Educators should also consider and educate students regarding the influence globalization and westernization of cultural food habits has in relation to cultural humility.

While educators felt confident in teaching cultural humility through foods/menu planning, they felt less confident in teaching it in relation to general management topics. However, they stated that teaching cultural humility in relation to management topics was most important. Educators recognize the significance in teaching cultural humility with management topics but lack the confidence to teach it. This lack of confidence may be due to the lack of standardization in cultural humility training [17, 38]. Frank et al. [38] explain that to overcome this gap in training, educators need to employ an individualized response, self-regulated learning, and a personal commitment to educating

themselves on these topics. Their lack of confidence could also be tied to a potential lack of understanding of the ACEND standards and not realizing that what they are already doing (menu assignments or in class discussions etc.) are sufficient based on the required standards. Further, this data may suggest a gap in educators' understanding that cultural humility is focused more on being "other-oriented" [9] across both interactions and services, rather than solely services (in this case, the meals from the menu). Encouraging students to engage in self-reflection and self-critique [9] as they are in didactic and practical foodservice and management settings would be a more comprehensive approach to cultural humility.

Lack of time and resources were among the barriers that educators experienced when teaching cultural humility. Educators expressed the challenge of trying to fit cultural humility into their course content while fulfilling other competencies and requirements. Comparatively, Morgan et al. [39] found that dietetics educators felt that not all desired topics or areas of practices in dietetics were, or could be, taught due to time constraints and a full curriculum. Thorton et al. [21] suggests programs should "scaffold multicultural educational concepts including identity, systemic racism, and health equity throughout the curriculum." By prioritizing cultural humility throughout the curriculum, educators can ensure that it is being taught to students.

Educators in this study also experienced resistance from students regarding teaching cultural humility. This resistance appears to be a common issue among educators in teaching sensitive topics similar to (DEI) [40–43]. While this issue has not been assessed within dietetics education, Mildred and Zuniga review the resistance that social work educators face when teaching multicultural education [40]. They recommend that multicultural training be provided for educators at the university level to help better prepare educators for student resistance and that student resistance should not be seen as poor preparation but a "predictable and potentially valuable part of the educational process." [40] Similarly, Thorton et al. [21] recommended that all dietetics programs assess DEI among faculty, advisors, administrators, and preceptors and require regular DEI trainings to better prepare educators to teach DEI in dietetics programs. Importantly, this data was collected in 2022 and since then, there has been a significant shift in the US Department of Education's perspective and direction on DEI practices in higher education due to the current presidential administration's directives [44]. With DEI being a politically charged topic, additional challenges for educators as they interact with students or comply with federal guidance are likely emerging.

One of the most reported barriers that educators faced was the lack of diversity whether among the student and/or faculty population or the general population. This lack of diversity creates a challenge in exposing students to different cultures and backgrounds when there is a lack of diversity within the clientele they are working with in real-life settings. The demographics within the dietetics profession [15] do not reflect USA's demographics making it difficult to teach cultural humility. As mentioned, Simons et al. found that dietetic students undergoing internships and working with clientele from diverse backgrounds experience more cultural awareness development with an increase in the quality of their diverse interactions compared to the length of the internship. [36]

Other educators felt that they had not experienced any barriers due to having a diverse student population or sufficient resources/personal experiences. This is an encouraging sign for dietetics education that some educators have felt successful in their teaching of cultural humility regarding foodservice and management.

The need for pedagogical resources related to cultural humility and foodservice and/or management is clear. Most educators feel that the Academy and their organizations (university/college) provided appropriate resources; however, others felt that they have had to educate themselves using outside resources. Previously, the Academy has provided various resources on eatrightpro.org under Inclusion, Diversity, Equity and Access to prepare educators to teach cultural humility including webinars, monthly messages from the ACEND board, links to articles and books, resources from other organizations, member interest groups, interactive series, and opportunities like grants and scholarships [45]. However, due to the current executive orders from the current Presidential administration, some of the resources may no longer be available [9]. If allowed, ACEND may also consider notifying educators using some type of "fact sheet" when policies or terms related to DEI issues are changed or issued. While ACEND provides various resources, these educators desired resources that appropriately integrated cultural humility with foodservice and management to feel more confident in their ability to properly teach cultural humility in their courses.

Strengths and Limitations

A potential limitation to the present study is that all researchers are from a religious university with low racial/ethnic diversity; however, steps were taken to minimize bias as described in the methods above. Another possible limitation is the small sample size analyzed, however, the sample represented 35 states and a variety of dietetics programs at various universities and colleges.

There was little racial, ethnic and gender diversity among the participants of the survey, but this is representative of the profession. A strength to the study is that both qualitative and quantitative data gathering was employed which provided not only statistical analysis but also the attitudes and beliefs of educators in their own words. Future research should focus on interventions to improve dietetics foodservice and management educators understanding and confidence in teaching cultural humility.

Conclusions

Foodservice and management educators are faced with the challenge of teaching cultural humility in their courses while encountering many barriers like student resistance, low diversity, unstandardized resources relating to foodservice and/or management topics and finding time to include it. Educators recognize the significance in teaching cultural humility and most include it in their courses, however they also believe that cultural humility may be best learned in real-life work settings rather than in the classroom. To assist foodservice and management educators in their efforts to meet the current ACEND standards, more foodservice and dietetics management-related cultural humility resources are needed. Foodservice and management educators should continue to highlight cultural humility in their course content and seek out resources to help them in their efforts.

Abbreviations

ACEND	Accreditation Council for Education in Nutrition and Dietetics
DEI	Diversity, Equity, and Inclusion
DPD	Didactic Program in Dietetics
EL	Experiential Learning

Acknowledgements

Not applicable.

Authors' contributions

TPM, EW, NS, and EVP designed the study and developed the survey. KM and NS collected and analyzed the data and drafted the manuscript. TP, EW, NS, EVP, and KM each conducted a thorough review of the final manuscript.

Funding

This study was partially funded through a CURA grant from the College of Life Sciences at Brigham Young University.

Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

Approval was obtained from the Brigham Young University Institutional Review Board prior to recruitment and data collection. Implied consent was obtained from all participants and/or their legal guardian.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 15 May 2024 Accepted: 6 May 2025

Published online: 15 May 2025

References

- Vespa J, Medina L, Armstrong DM. Demographic turning points for the United States: population projections for 2020 to 2060. United States Census Bureau. 2018. <https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf>. Accessed June 2023.
- U.S. Bureau of Labor Statistics. Labor force statistics from the current population survey. 2022. <https://www.bls.gov/cps/cpsaat18.htm>. Accessed February 2023.
- Foronda C. A Concept Analysis of Cultural Sensitivity. *J Transcult Nurs*. 2008;19(3):207–12.
- FitzGerald C, Hurst S. Implicit bias in healthcare professionals: a systematic review. *BMC Med Ethics*. 2017;18:19.
- Foronda C, Reinholdt MM, Ousman K. Cultural Humility: A Concept Analysis. *J Transcult Nurs*. 2015;27(3):210–7.
- Lund A, Latortue KY, Rodriguez J. Dietetic training: understanding racial inequity in power and privilege. *J Acad Nutr Diet*. 2020;12(8):14371–21440.
- Centers for Disease Control and Prevention. Cultural competence in health and human services: national prevention information network. Published 2020. <https://npin.cdc.gov/subjects/cultural-competence>. Accessed 13 May 2025.
- Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>. Accessed July 13, 2022.
- Inclusion, Diversity, Equity and Access. Academy of Nutrition and Dietetics. <https://www.eatrightpro.org/about-us/our-work/inclusion-diversity-equity-and-access> Accessed March 26, 2025.
- Lekas, et al. Rethinking cultural competence: shifting to cultural humility. *Health Serv Insights*. 2020;13:1–3.
- Code of Ethics for the Nutrition and Dietetics Profession. The Academy of Nutrition and Dietetics. Published 2018. <https://www.eatrightpro.org/practice/code-of-ethics/code-of-ethics-for-the-nutrition-and-dietetics-profession>. Accessed August 2023.
- ACEND accreditation standards for nutrition and dietetics didactic programs. ACEND. <https://www.eatrightpro.org/-/media/eatrightpro-files/acend/accreditation-standards/2022standardsdpd-82021.pdf?la=en&hash=5211EDDE999FB860D220DF0227AC573B133A845D>. Accessed July 8, 2022.
- Griswold K, Rogers D. Compensation and benefits survey. *J Acad Nutr Diet*. 2020;120(3):448–64.
- Jager M, Boeft A, Leji-Halfwerk S, Sande R, et al. Cultural competency in dietetic diabetes care-A qualitative study of the dietician's perspective. *Health Expect*. 2020;23:540–8.
- Doesdel E. Compensation and benefits survey 2021. *J Acad Nutr Diet*. 2021;121(11):2314–31.
- Klemm S. Ethics: Health Equity and Dietetics-Related Inequities. *J Acad Nutr Diet*. 2022;122(8):1558–62.
- McCabe CF, O'Brein-Combs A, Anderson OS. Cultural competency training and evaluation methods across dietetics education: a narrative review. *J Acad Nutr Diet*. 2020;120(7):1198–209.
- Andrade JM. Determining the associations between dietetic-related activities and undergraduate dietetic students' general cultural knowledge, attitudes and beliefs. *Nutr*. 2019;11(6):1202.
- Koh J, Scott N, Lucas A, Kataoka M, MacDonell S. Developing dietetic students' confidence in multicultural communication through flipped learning. *Teach Learn Med*. 2021;33(1):67–77.
- Wright L, Lundy M. Perspectives of cultural competency from an international service-learning project. *J Acad Nutr Diet*. 2015;115(5):S6–9.
- Thornton H, Melton T, Johnson C, Lewis DB. Evolving beyond the world foods course: creating racially and ethnically inclusive educational spaces for dietetics students. *J Acad Nutr Diet*. 2022;122(11):1993–2000.

22. Roseman M, Miller S. Academy of Nutrition and Dietetics: Revised 2021 Standards of Professional Performance for Registered Dietitian Nutritionists (Competent, Proficient, and Expert) in Management of Food and Nutrition Systems. *J Acad Nutr Diet*. 2021;121(6):1157–74.
23. U.S. BUREAU OF LABOR STATISTICS. Labor Force Characteristics by Race and ethnicity, 2021: BLS Reports: U.S. Bureau of Labor Statistics. www.bls.gov. Published January 2023. <https://www.bls.gov/opub/reports/race-and-ethnicity/2021/home.htm>. Accessed May 15, 2024.
24. National Restaurant Association. Restaurant Employee Demographics Data Brief. March 2022. <https://restaurant.org/getmedia/21a36a65-d5d4-41d0-af5c-737ab545d65a/nra-data-brief-restaurant-employee-demographics-march-2022.pdf>. Accessed February 2023.
25. Shorten A, Smith J. Mixed methods research: expanding the evidence base. *Evid Based Nurs*. 2017;20(3):74–5.
26. Braun V, Clarke V, Boulton E, Davey L, McEvoy C. The online survey as a qualitative research tool. *Int J Soc Res Method*. 2021;24(6):641–54.
27. Safdar N, Abbo LM, Knobloch MJ, Seo SK. Research Methods in Healthcare Epidemiology: Survey and Qualitative Research. *Infect Control Hosp Epidemiol*. 2016;37(11):1272–31277.
28. Qualtrics. Version XM. Qualtrics; 2020. <https://www.qualtrics.com>
29. U.S. Department of Health and human services. Exempt Research determinations FAQs. <https://www.hhs.gov/ohrp/regulations-and-policy/guidance/faq/exempt-research-determination/index.html>. Accessed 13 May 2025.
30. IBM Corp. Released 2023. IBM SPSS statistics for windows, version 29.0.2.0. Armonk, NY: IBM Corp.
31. Ahern KJ. Ten tips for reflexive bracketing. *Qual Health Res*. 1999;9(3):407–11.
32. Tufford L, Newman P. Bracketing in qualitative research. *Qual Soc Work*. 2012;11(1):80–96.
33. Hsieh HF, Shannan S. Three approaches to qualitative thematic analysis. *Qual Health Res*. 2005;15(9):1277–88.
34. McHugh M. Interrater reliability: the kappa statistic. *Biochem Med*. 2012;22(3):276–82.
35. Holik MT, Heinerichs S, Wood J. Using experiential learning to enhance student outcomes in a didactic program in dietetics foodservice management course. *Internet J Allied Health Sci Practice*. 2021;19:1.
36. Simons L, Fehr L, Blank N, et al. Lesson learned from experiential learning: what do students learn from a practicum/internship?. *J Higher Educ*. 2012;24(3):325–34.
37. Plasencia J, Norman-Burgdolf H, Weatherspoon L. Assessment of cultural sensitivity in dietetics education. *NACTA*. 2021;65:376–82.
38. Frank G. Training and self-regulating education promote cultural competence. *J Acad Nutr Diet*. 2020;121(2):213–4.
39. Morgan K, Reidlinger DP, Sargeant S, Crane L, Campbell KL. Challenges in preparing the dietetics workforce of the future: An exploration of dietetics educators' experiences. *Nutr Diet*. 2019;76(4):382–91.
40. Mildred J, Zuniga X. Working with resistance to diversity issues in the classroom: lessons from teacher training and multicultural education. *Smith College Studies in Social Work*. 2014;74(2):359–75.
41. Deal K, Hyde C. Understanding MSW Student Anxiety and Resistance to Multicultural Learning: A Developmental Perspective. *J Teach Social Work*. 2008;24(1–2):73–86.
42. Seward D. Multicultural Training Resistances: Critical Incidents for Students of Color. *Cons Educ*. 2019;58(1):1–79.
43. Parkhouse E, Yi LuC, Massaro VR. Multicultural education professional development: a review of the literature. *Am Edu Res J*. 2019;89(3):335–496.
44. Trainor C. Letter from acting assistant secretary for Civil Rights of the United States Department of Education. Published February 2025. [chrome-extension://efaidnbmnnnibpcjpcglclefindmkaj/https://www.ed.gov/media/document/dear-colleague-letter-sffa-v-harvard-109506.pdf](https://www.ed.gov/media/document/dear-colleague-letter-sffa-v-harvard-109506.pdf). Accessed March 26, 2025.
45. Diversity, Equity and Inclusion. Eatrightpro.org. Published 2024. <https://www.eatrightpro.org/acend/about-acend/diversity-equity-and-inclusion>. Accessed May 15, 2024.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.