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Bridging Leadership Perspectives: Practitioner vs. Educator in the Healthcare Field of Dietetics

Katie R. Miner[1], Laura B. Holyoke[2*] and Samantha A. Ramsay[1]

[1]School of Family and Consumer Sciences, University of Idaho, USA.
[2]Department of Leadership and Counseling, University of Idaho, USA.

Authors' contributions

This work was carried out in collaboration among all authors. Authors KRM and LBH planned the study and developed questionnaires. Author KRM collected the data. Authors KRM and SAR analyzed the data. Author KRM wrote the first draft with contributions from author LBH. All authors reviewed and commented on drafts of the manuscript. Authors KRM and LBH prepared the final manuscript.

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ABSTRACT

Aims: Identify leadership competencies and skills needed by entry-level registered dietitians. An overarching goal was to provide curriculum developers in healthcare professions directions about leadership competencies required for entry into the professional workforce.
Study Design: Modified Delphi Study.
Methodology: We invited 105 participants to populate two expert panel groups (1) practitioners serving in professional leadership positions as presidents for state affiliate associations of the Academy of Nutrition and Dietetics (N=52) and (2) educators of dietetic professionals holding position of director of a Coordinated Dietetic programs (N=53). Perspectives about leadership competencies and skills from registered dietitians were examined through a three round Delphi study analyzing views of two expert panel groups: practitioners and educators.
Results: Initially, panelists identified leadership priorities for dietetics educational programs. In subsequent rounds, panelists rated importance of leadership priority statements. Through qualitative analysis, responses between panel groups were compared. Additionally, chi-square analysis was

**Corresponding author: E-mail: holyoke@uidaho.edu;*

conducted to determine the relationship between ratings of each panel. Practitioners and educators rated 32 out of 202 leadership statements differently ($p<0.5$), indicating some contrasting leadership perspectives based on professional role.
Discussion: Findings from qualitative analysis suggest different leadership perspectives may exist between educators and practitioners. Educators are urged to consider differences in leadership perspectives when preparing students for leadership positions.

Keywords: Education; Delphi study; dietetics; healthcare; leadership.

1. INTRODUCTION

Healthcare professionals emphasize the importance of leadership and view it as a critical competency for practitioners [1-3]. Traditionally, the emphasis for practitioners has been competency of clinical skills with limited consideration for business skills and leadership ability. Rapid and dramatic change has affected and continues to impact healthcare fields[2] creating a need to prepare professionals for leadership roles. Education programs in healthcare and related professional fields increasingly include leadership components beyond clinical skills [1,4,5].

The dietetics healthcare profession recognizes the importance of leadership in practice [6] Dietetics education prepares students for entry-level practice as registered dietitian nutritionists. In contrast to many other health professions, dietetics has traditionally included management skills in dietetics education. However, recently emphasis has shifted towards clinical nutrition skills to prepare competent practitioners [7,8]. The need for leadership in dietetics has been implored for decades [6,9,10] with increasing attention during the last 10 - 15 years, requiring dietetics students to demonstrate competencies related to leadership skill [11].

As dietetics and other professional education programs expand competency based educational standards to include leadership competencies, decisions need to be made about which competencies to include. Determination of which leadership competencies to integrate into the curriculum is best made by dietetic nutritionist educators and leader practitioners. Differing opinions related to both the importance of leadership and the leadership skill level required for entry-level practice invites exploration. This study examined leadership perspectives between two groups of dietetic leaders: educators in a professional program and practitioners serving in professional leadership positions.

2. METHODS

A modified Delphi technique [12] was used to explore expert opinions of leadership related to dietetics education. The Delphi technique is a group process used for functions of problem solving, idea generating, and consensus forming with characteristics of anonymity, controlled feedback and repeated questioning [13-15]. Three rounds of questioning, which followed Couper's Delphi Model [16] were implemented for the study.

2.1 Subjects

Participants included two expert panel groups: (1) practitioners serving in professional leadership positions as presidents for state affiliate associations of the Academy of Nutrition and Dietetics (N=52); and (2) educators of dietetic professionals holding position of director of a Coordinated Dietetic program (N=53). Of 105 invited experts, 38% (N=40) completed round 1. After removing two samples for overlapping professional roles, responses from 20 practitioners and 18 educators were compared. Published Delphi studies normally include a sample of 10 to 100 experts; [17] yet a sample of 10 to 15 participants produces sufficient results [18].

2.2 Delphi Design and Implementation

Opinions from panel groups were collected over two months during three rounds of on-line questionnaires administered through Qualtrics Research Suite©, [19] an on-line computer program available for developing and implementing surveys. Following a modified classical technique, qualitative responses were gathered in round 1, whereas rounds 2 and 3 solicited quantitative ratings [20] Round 1 focused on generating opinions related to leadership. Panel members were asked to define leadership specific to dietetics and identify knowledge, skills, training, and experiences required for entry-level practitioners. During

rounds 2 and 3, panel members rated the importance of statements generated from round 1 about knowledge, skills, training, and experiences, keeping in mind dietetics practice and requirements for education programs.

2.3 Analysis

Round 1 content analysis was conducted by two independent raters who reviewed and coded responses into categories. Kappa coefficients were calculated using IBM SPSS Statistics [22] for each question evaluated. Themes were noted and used to identify categories of leadership statements then included on the rating questionnaires. Analysis of round 2 and 3 ratings was conducted through a chi-square test for independence using IBM SPSS Statistics [22] to identify significant relationships between ratings by panel groups indicating different views on leadership priorities.

3. RESULTS

The first round garnered 38 responses. Two panel groups materialized based on professional role: (a) individuals working as practitioners and (b) individuals in educator positions. Demographic data indicated similarities between panel groups based on gender (97% female), ethnicity (93% white) and education (93% holding advanced degrees). Differences noted included education beyond a master's level with 5% of practitioners and 44% of educators holding a doctoral degree. Seventy-eight percent of the educators were 45 years old or older whereas only forty-five percent of the practitioners fell into this age range.

3.1 Content Analysis of Leadership Themes

Table 1 contains leadership themes that emerged from content analysis. Similar themes emerged between practitioners and educators and most themes were evenly distributed across panel groups. Three themes emerged independently to either the practitioner or educator panel group.

In rounds 2 and 3 panelists rated 202 leadership statements, generated in round 1, for importance in entry-level practice and necessity for education programs. Relationships between panel group ratings were observed for differences in leadership priority statements in rounds 2 and 3. For 32 statements, a significant relationship was observed with one panel group rating priority statements higher than the other group. Table 2 includes statements between panel group ratings for both rounds, along with ratings for each statement based on the group that rated statements higher. A total of ten statements showed a significant relationship between panel groups regarding the level of rated importance for entry-level practice (round 2). When a significant difference was observed between practitioner and educator ratings, practitioners tended to rate statements in the categories of definition themes, knowledge, training, and experience higher than educators. An exception was the category of leadership skills, which educators tended to rate higher.

Further relationships between ratings were identified in the final round (round 3). When asked to rate statements panelist thought should be incorporated into programs, 22 statements indicated significant relationships between practitioners and educators (see Table 2). Practitioners assigned higher ratings to statements related to the dietetics profession and business skills. As with round 2, practitioners rated leadership statements higher than educators. Practitioners rated statements to include additional curriculum content in education programs higher than educators.

Qualitative comments during rating rounds provided an opportunity for panelists to elaborate on their views of leadership (see Table 3). Panelists' statements illustrated differing views of leadership depending on professional role. While some themes did emerge within the separate panel groups (themes from educators and themes from practitioners), there were trends that emerged from both groups.

Practitioners endorsed a necessity for leadership skills at entry-level and requirements in education, while educators expressed concerns over increased educational requirements added to an already full curriculum. Both groups indicated uncertainty over the skill level required for entry level professionals commenting that leadership skills belonged to a more advanced skillset. A representative comment, "skills come with practice and [I am] not certain entry level dietitians have the 'academic preparation' to begin in a leadership role." Additionally, doubts surfaced whether educational institutions were the best place to prepare students for leadership roles. One panelist remarked, "I don't think you can teach leadership skills in a classroom."

Table 1. Leadership definition themes identified by practitioners and educators in round 1 of Delphi study

Category (Kappa, p)	% of practitioner responses (N=20)	Themes generated from educators and leaders (n)	% of educator responses (N=18)
Leadership Definition	50	Having a vision [4]	50
(0.778,p < .001)	50	Ability to chart course and achieve outcomes [8]	50
	0	**Being able to see the big picture [3]**	**100**
	42.9	Being willing and able to make decisions [7]	57.1
	50	Acting in the best interest of others instead of oneself [4]	50
	50	Advancing the profession of nutrition and dietetics [10]	50
	50	Promoting the RDNs as the food and nutrition expert [6]	50
	100	**Staying current in knowledge [4]**	**0**
	40	Serving in professional organizations [5]	60
	50	Holding leadership positions [6]	50
	62.5	Inspiring and motivating others [8]	37.5
	60	Promoting teamwork and collaboration [5]	40
	66.7	Mentoring students, interns, and/or younger dietitians [6]	33.3
Leadership Knowledge	44.4	Communication [9]	55.6
(0.556, p <. 001)	20	Management [8]	80
	60	General Dietetics[10]	40
	71.4	Dietetics Profession [7]	28.6
	54.5	Leadership Qualities and Characteristics [11]	45.5
	50	Leadership Theory [6]	50
Leadership Skills	50	Communication [28]	50
(0.597,p < .001)	62.5	Teamwork [8]	37.5
	50	Management [16]	50
	50	Professional Skills [24]	50
Leadership Training	63.6	Curriculum [11]	36.4
(0.896, p < .001)	50	Activities and Assignments [24]	50
	28.6	Projects [14]	71.4
	50	Discussions [4[	50
	60	Presentations [10]	40
Leadership Experiences	59.1	Participation in Organizations [22]	40.9
(0.753, p < .001)	33.3	Participation in Student Organizations [9]	66.7
	75	Work Experience [8]	25
	63.2	Volunteer Experience [19]	36.8
	100	**Mentoring [4]**	**0**
	44.4	Supervised Practice Experience [9]	55.6

Note. Themes emerging from only one panel group in boldface

Table 2. Delphi panel group ratings of leadership priority statements in importance for entry-level practice (Round 2) and necessity for education programs (Round 3)

	Priority statements from practitioners				Priority statements from educators
Round 2: Rated importance for entry-level practice					
		Rating	**χ^2 (df)**	***P* value**	
Round 2	**Leadership definition**				
	Advancing the profession of dietetics	SA	8.429(1)	0.004	
	Staying current in knowledge	SA	4.492(1)	0.034	
Round 2					**Leadership skills**
		SA	8.513(2)	0.014	Public speaking skills
		SA	4.464(1)	0.035	Presentation skills
		SA	10.786(2)	0.005	Human Resource Management skills
		SA	4.492(1)	0.034	Vision skills
Round 2	**Leadership training**				
	Participating in Academy of Nutrition and Dietetics leadership training	A	9.353(2)	0.009	
	Organizational structures and making oneself invaluable to others utilizing offered services	SA	7.545(2)	0.023	
Round 2	**Leadership experiences**				
	Attending a state or national dietetics meeting	SA	6.655(2)	0.036	
	Attending legislative day: state capitol	SA	11.156(2)	0.004	
Round 3: Necessity for Education Programs					
Round 3	**Leadership knowledge**				
	Knowledge of career benefits of leadership	R	7.475(2)	0.024	
	Awareness of the Academy of Nutrition and Dietetics organization and impacts	AN	7.462(2)	0.024	
	Knowl. of leadership theories	R	7.351(2)	0.025	
	Knowl. of personality traits of leaders	R	9.672(2)	0.008	
Round 3	**Leadership skills**				
	Group management skills	R	8.895(2)	0.012	
	Business development skills	R	7.469(2)	0.024	
	Marketing skills	R	8.962(2)	0.011	
	Budget skills	R	6.261(2)	0.044	
	Committee skills (setting, conducting, and following agenda, Roberts Rules of Order, conflict managmnt)	R	9.566(3)	0.023	
	Public policy skills	R	7.175(2)	0.028	

	Priority statements from practitioners				Priority statements from educators
Round 2: Rated importance for entry-level practice					
		Rating	**χ^2 (df)**	***P* value**	
Round 3	**Leadership training**	R	7.351(2)	0.025	
	Leadership coursework	AN	7.152(2)	0.028	
	Communications course	R	9.471(2)	0.009	
	Public policy training	R	10.662(2)	0.005	
	Participating in Academy of Nutrition and Dietetics leadership training Marketing projects requiring leadership skills	R	8.250(2)	0.016	
	Group projects that include feedback on leader's performance	AN	6.018(2)	0.049	
	Organizing and conducing annual nutrition career fair	AN	8.532(3)	0.036	
Round 3	**Leadership experiences**				
	Attending legislative day at the state capitol	AN	6.749(2)	0.034	
	Assisting leaders of local professional organizations	R	10.731(2)	0.005	
	A required year of active leadership in professional organization	R	8.679(3)	0.034	
	Extracurricular activities	R	10.118(3)	0.018	
	Exposure to leaders in dietetics through shadowing experiences	R	8.604(3)	0.035	

Note: Round 2 Ratings: SA = Strongly Agree; A = Agree. Round 3 ratings: AN=Absolutely Necessary, R=Recommended. Significant difference of p <.05 observed between panel groups indicating a difference in opinion for the priority statement

Table 3. Themes generated from general comments provided by practitioner and educator Delphi study panalists

Theme	Panel	Sample comments
Necessity for leadership skills at entry-level	P	"There needs to be a base of leadership training and skills for all dietetics students. This profession means making decisions, affecting the lives of others and the job satisfaction occurs when goals are accomplished. A basic knowledge is needed if [an] individual [has] a desire to be an effective practitioner."
Importance of leadership for the profession	P	"I fear that many dietitians do not understand the negative impact that lack of self and professional promotion is having on the future of our profession. Regardless of your job description as a dietitian we each have a responsibility to advance the future professional opportunities." "Being an RD without a foundation in leadership hinders the future of our profession."
Concern over increased educational requirements	E	"We have so much to teach entry level professionals, we can't easily fit so much into a curriculum, and make it meaningful and fit into a certain number of years… Be careful with pushing for more and more competencies for us to expose students to during their training." "Expecting all students/interns to demonstrate these skills / competencies is not reasonable or viable."
Uncertainty of importance of leadership for the profession	E	"Not all RDs need to become leaders. Having well trained followers is also important." "It's not necessarily worth teaching someone leadership skills if they aren't interested in being a leader. Leadership is not for everyone, which is a good thing since we can't all be leaders."
Uncertainity of leadership skill level required for entry-level professionals	B	"Many of these skills build as the entry-level RD grows; it is a lot to expect all of these skills in the beginning or the first 5 years." "Skills come with practice and [I am] not certain entry-level dietitians have the 'academic preparation' to begin in a leadership role. Mentoring by a more 'seasoned' peer may be needed."

Theme	Panel	Sample comments
		"Leadership comes from years of working with a program and developing the knowledge and best practices around a certain area. It would be unrealistic to expect an intern to have these higher level skills." "These are not entry level skills, there is already too much else to learn and master."
Role of Education in Leadership Training	B	"Education prepares students/interns for entry level practice. Few will have a context for learning about the advanced concepts related to leadership. It makes much more sense to provide a depth of knowledge/skill/competency in entry level dietetics to students/interns and then allow them to learn more about leadership as they grow in the profession. Knowledge without context will be quickly forgotten." "I don't think you can teach leadership in a classroom." "Most students will not have a context for much of the information mentioned above. I don't think it needs to be included in the education process except in the broadest sense."
Clinical Skill Emphasis	B	"A good foundation in nutrition in your chosen specialty will give you the confidence needed to face challenges. As your career matures, your knowledge will grow" indicating the nutritional competency was still the foundation for leadership and entry-level practice. "It is always valuable to get exposure to leadership – however, I am concerned that adding too many extra required activities will take away from training in science and nutrition….I feel that leadership training is very important but not if it turns into a new list of tasks."

Note. Panel Groups: P = Practitioners; E = Educators; B = Both Practitioners and Educators

Overall, panelists generated more than 200 statements related to leadership skills, knowledge, training, and experiences for entry-level practice during the first round of the study. During rating rounds, high agreement from both panel groups was observed with 97% of statements recommended or required for educational programs. A representative summary statement, "There needs to be a base of leadership training and skills for all dietetics students. This profession means making decisions, affecting the lives of others and the job satisfaction occurs when goals are accomplished. A basic knowledge is needed if [an] individual [has] a desire to be an effective practitioner." While differences were identified, agreement between panel groups was common in rating leadership priority statements. Qualitative responses tended to be negative and conflicted with the overall positive trend of agreement in the quantitative responses related to leadership priorities.

4. DISCUSSION

Study results elucidated some differences between the practitioner and educator panels related to the importance of leadership. The results showed an expanding progression throughout the study relating to their differing perspectives. A slight variation transpired during initial idea generating in response to the open-ended questions. However, when feedback and results from previous rounds were provided, differences began to emerge in panelists opinions regarding leadership.

Educators assigned lower ratings to leadership statements pairing them with concerns expressed over additional educational requirements, an apprehension also expressed in the literature [21]. All significant differences between panel groups received higher ratings by practitioners over educators with an exception of leadership skill during round 2. While nearly all themes emerged from both panel groups, subsequent educator comments increased regarding the amount of potential additional competencies recommended for educational programs. Statements indicated an unrealistic expectation for students to obtain all of the skills and the impracticality of including additional activities within an already full curriculum. Previous researchers confirmed that educators share similar reluctances regarding the inclusion of additional coursework and activities [21].

Higher ratings for selected statements by practitioners may indicate that educators may not perceive value in the same areas that practitioners are finding useful for work and leadership roles. These areas may be important to include in educational programs. While both groups indicated that leadership is important, careful consideration is recommended regarding leadership expectations of entry-level practitioners that need to be taught in educational programs.

4.1 Views of Leadership Importance and Leadership Education

Continued focus on clinical competency may still be the priority for both educators and practitioners. Despite an emphasis on the importance of leadership in professional organizations, [7,22] not all professionals may share similar opinions. While clinical skills are considered essential for education, the panel groups differed about requisite leadership skills for entry-level practice. Both practitioners and educators expressed opinions about the importance of leadership but held divergent opinions about leadership required for entry-level roles.

Researchers often consider leadership as a way to advance the dietetics profession and contribute to the future [7,23-26] Advancing the profession emerged as a theme from both groups when they defined leadership. Leadership expectations within a profession should be identified and clearly stated. Comments illustrated both practitioners and educators may not recognize value of leadership in the dietetics profession or the importance of including leadership within education programs. Leadership expectations of entry-level practitioners should be addressed at the professional level. The field of dietetics claims leadership as an essential practice [7,8] and already included it as a competency for education [11].

Barriers to including leadership in professional curriculums are cited in the literature. Cox et al. [21] found faculty did not support inclusion of additional courses when asked about adding leadership to an engineering curriculum, reinforcing educators' resistance towards additional coursework. Curriculums are tightly constrained with scarce capacity for addition of new courses. While practitioners recommended leadership coursework, educators were less

likely to support new course requirements. Observed differences in leadership perspectives between practitioners and educators demonstrate an importance for educators to recognize current professional issues experienced by practitioners.

5. PRACTICE IMPLICATIONS

Three key points from this study should be noted when considering differences between educators' and practitioners' leadership perspectives. First, the importance of leadership knowledge, skills, training and experiences in educational programs tended to receive higher ratings from practitioners versus educators when a difference was observed between ratings. This indicates that leadership may be more valued by practitioners than educators. Second, practitioners more often stated a need to teach entry-level leadership skills in education while educators expressed reluctance to increase educational requirements for students entailing additional content. The higher ratings on selected statements by practitioners may indicate that educators dismiss the value or may not understand certain methods that practitioners are finding useful for work and leadership roles.

A third point for consideration is that a consensus on the importance of leadership did not exist among panelists. The necessity of leadership skills was questioned by panelists from both practitioner and educator groups, while clinical competency was emphasized as a priority. These findings illustrate the need for continued emphasis on leadership, assessment of leadership skills required for professional practice, and evaluation of the benefits of leadership development.

6. CONCLUSION

Findings indicated the importance of leadership; however, leadership perspectives diverged between the two panels. Implications from this study suggest educators seek input about practitioners' roles in developing leadership curriculums. Being mindful of this curriculum gap is recommended when developing leadership training in healthcare education programs. This study was limited to expert panel views from the dietetics profession. Additional research in other professional fields is useful for application to specific educational segments. Continued discussion related to leadership roles of practitioners in professional healthcare helps to keep the field abreast of ongoing needs.

Views vary about leadership expectations for entry-level professionals and the necessity of adding leadership competencies to educational programs. Leadership discussions add value when seeking consensus about leadership expectations required within a profession.

CONSENT

As per international standard, participants' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

Ethical approval has been granted from the University of Idaho Institutional Review Board for research involving human subjects (18 September 2013, 13-227).

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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