

Barriers and Motivators to Being a
Dietetic Internship Preceptor in Arizona

by

Alissa Wooden

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Graduate Supervisory Committee:

Donna Winham, Chair
Sandra Mayol-Kreiser
Lisa Morse

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ABSTRACT

Background The shortage of available dietetic internship (DI) positions for qualified applicants threatens the future of dietetics. Only about half of all applicants will obtain a slot. Additional internship positions are needed and can be offered only if more practitioners become preceptors.

Objective To examine the perceptions associated with the role of DI preceptor among nutrition and dietetic practitioners and identify barriers and motivators to becoming a DI preceptor in Arizona.

Design An online survey adapted from previous published instruments was administered between July and September 2011 to dietetic and nutrition professionals eligible to precept dietetic interns.

Participants RD, DTR, and school food service professionals on file with Arizona registries were invited to participate in the survey. A total of 675 subjects participated in the study.

Statistical analyses performed Chi-square analysis was used to assess differences between preceptors and non-preceptors for categorical variables. Independent t-tests were used to analyze differences between groups for continuous variables.

Results Respondents included 314 current or former preceptors and 361 non-preceptors with no significant differences in gender, age, or race between groups. Preceptors typically perceived the preceptor role more favorably than non-preceptors. Non-preceptors reported fewer benefits and

more disadvantages to being a preceptor. Only 18% of non-preceptors knew how to become a mentor.

Conclusions Motivators for practitioners to become preceptors and continue in the role include personal benefits, dedication to the role and profession, and contributions to the workplace by interns. Barriers to mentoring interns include lack of compensation, increased workload, lack of support, lack of training, lack of resources, intern liability, and lack of knowledge of how to become a preceptor. Results of the study can be used to target barriers and emphasize benefits associated with the preceptor role to encourage participation in the preceptor process to make more internship positions available.

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Chapter 1

INTRODUCTION

The future of dietetics depends on the successful training of students in the practice setting (Conklin & Simko, 1995; Jay & Hoffman, 2000). Dietetic students must complete an accredited internship program to be eligible to take the national examination for Registered Dietitians (RDs). Fulfilling the Didactic Program in Dietetics (DPD) requirements, however, does not ensure acceptance into an internship (Wilson, 2010). Only about half of total dietetic applicants will secure an internship position (CADE, 2011).

The lack of available internship positions is a concern to dietetic practitioners. Without completing an internship, potential RDs may be lost to other health professions or pursue competing non-RD nutritionist careers (Wilson, 2010). Although the dietetic internship (DI) shortage problem has worsened since 2004, there was a slight improvement in 2011. The April 2011 national internship match rate was 52%, up from 50% in the previous 2 years (CADE, 2011). This increase is likely due to the recent efforts of the Accreditation Council for Education in Nutrition and Dietetics (ACEND) to increase the number of internship positions (CADE, 2011).

Additional internship positions can be created only if more practitioners are willing to become preceptors (Wilson, 2010). The preceptor performs a fundamental role in the socialization of dietetics students by facilitating the progression from novice to professional (Conklin

& Simko, 1995). Therefore, recruiting and retaining preceptors is essential to sustain the next generation of dietetic practitioners.

Preceptors receive little or no tangible rewards for mentoring dietetic interns (Marincic & Francfort, 2000; Taylor et al., 2010). However, a review of the literature identified several personal and non-material benefits associated with serving as a preceptor. Some of the most common benefits include the opportunity to share knowledge and expertise, assist dietetic interns in applying their knowledge, keep current and stimulated in the profession, improve teaching skills, gain personal satisfaction and a sense of achievement, enhance professional knowledge, contribute to the profession, and observe the interns develop as professionals (Conklin & Simko, 1995; Gilbride & Conklin, 1996; Jay & Hoffman, 2000; Kruzich, Anderson, Litchfield, Wohlsdorf-Arendt & Oakland, 2003; Marincic & Francfort, 2002; Ortman & Arsenault, 2010). Similar benefits associated with the preceptor role have been cited in studies of nurse preceptors and allied health preceptors (Dibert & Goldenberg, 1995; Hill, Wolf, Bossetti & Saddam, 1999; Hyrkäs & Shoemaker, 2007; Stevenson, Doorley, Moddeman & Benson-Landau, 1995; Usher, Nolan, Reser, Owens, & Tollefson, 1999). Benefits accrued to the organization as a result of training dietetic interns were also cited.

Preceptors believe that interns bring a fresh outlook and new ideas to the workplace and complete projects that are useful to the department (Conklin & Simko, 1995; Gilbride & Conklin, 1996; Jay & Hoffman, 2000; Ortman & Arsenault, 2010). These intangible benefits provide incentive for

practitioners to mentor interns and are crucial to preceptors' satisfaction and continued service in the role.

Unfortunately, there are also drawbacks associated with the role of preceptor. A concern that mentoring dietetic interns will demand too much additional time is a key barrier in recruiting new preceptors (Conklin & Simko, 1995; Ortman & Arsenault, 2010; Taylor et al., 2010). Both nurse and DI preceptors assert that the extra time needed to train interns exceeds the time required to perform normal job responsibilities (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Kruzich et al., 2003; Marincic & Francfort, 2002; Stevenson et al., 1995; Taylor et al., 2010). Other disadvantages of mentoring dietetic interns include increased responsibility, additional paperwork, lack of training, lack of communication, lack of support, and lack of resources for the preceptor (Marincic & Francfort, 2002; Ortman & Arsenault, 2010; Taylor et al., 2010; Wilson, 2002). Nurse preceptors reported increased stress, lack of recognition, increased workload, and loss of patient contact as additional downsides to training interns (Stevenson et al., 1995). The added burden of taking on an intern likely discourages some practitioners from assuming the role of preceptor.

Although mentoring interns is typically a rewarding experience for preceptors, challenging students can present a negative aspect to the position. In a study examining performance issues of dietetic interns, 61% of respondents indicated they encountered at least one challenging or difficult student each year (Lordly, 2007). When asked to describe their most

frustrating experiences while mentoring, allied health preceptors overwhelmingly reported undesirable student behaviors and attitudes (Hill et al., 1999). Potential conflicts over a student's professional behavior can arise because of a generation gap between the intern and preceptor (Lordly & MacLellan, 2008; MacLellan & Lordly, 2008; Taylor et al., 2010).

Perceived benefits, rewards, and ongoing support for mentors are needed for preceptors to take on and remain committed to the preceptor role (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Taylor et al., 2010; Usher et al., 1999). Preceptors suggest that more training workshops, training materials, guidance for the preceptor, and opportunities to share information with other mentors would make the preceptor role more appealing (Kruzich et al., 2003; Ortman and Arsenault, 2010; Stevenson et al., 1995; Taylor et al., 2010; Wilson, 2002).

Perceptions regarding the preceptor role have been studied more extensively in other health fields, such as nursing and medicine than in dietetics. Studies examining the dietetic preceptorship are limited nationally and there have been no studies of DI preceptors in Arizona. Most of the research has focused only on the perceptions of preceptors without consideration of the views of other professionals in the field that may be eligible to mentor interns. The current study includes practitioners in the nutrition and dietetics field who have never precepted but are eligible to mentor dietetic interns in addition to current and former DI preceptors to

explore perceptions about the preceptor role in Arizona to provide insight as to why practitioners choose or choose not to precept dietetic interns.

Purpose Statement

The objective of this study was to conduct a statewide survey to identify the perceptions associated with the role of DI preceptor among nutrition and dietetic professionals in Arizona.

Specific Research Questions

1. Why do practitioners who are eligible to mentor dietetic interns choose not to serve as DI preceptors?
2. Why do practitioners who have served as DI preceptors in the past no longer want to do it?
3. What are the perceived motivators and barriers associated with the DI preceptor role?

Significance of Study

Results from this study will be used to target misperceptions associated with the DI preceptor role to encourage participation in the preceptor process to make more internship positions available.

Delimitations of Study

The study population was drawn exclusively from Arizona and is a convenience sample. The sample used in the current study may limit the ability of the results to be generalized to other populations and geographic locations.

Limitations of Study

The respondents in this study may have a particular interest in the subject matter of the survey and therefore not represent all perspectives of the target population.

The design of the structured instrument may result in the failure to identify other key barriers or motivators to serving as a DI preceptor.

Chapter 2

REVIEW OF LITERATURE

Perceived Roles of the DI Preceptor

Practitioners in the field of nutrition and dietetics foster the progression of an intern from student to professional during the supervised practice component of dietetics education. This fundamental role of practitioners serving as preceptors to provide training and guidance in a practical setting is shared among various health professions including physical therapy, medicine, pharmacy, and nursing. Although preceptorships are routinely used for practicum experiences across disciplines, there is little consensus among practitioners concerning the definition of the term preceptor (Wilson, 2002).

An Undefined Role. The lack of consensus regarding views of the DI preceptor role was demonstrated in a study of preceptors participating in the Mount Saint Vincent University Internship Education Program in Halifax, Nova Scotia (Ortman & Arsenault, 2010). From community, administrative, and clinical practice areas, 15 preceptors who had supervised more than one intern in the previous two years responded to questions posted in an online discussion group (WebCT) about the roles of a DI preceptor. Participants reported varied responsibilities of a preceptor including educating and evaluating, providing a safe learning experience for practical application with hands-on experience, and providing a supportive relationship. In addition, respondents indicated the preceptor position encompassed multiple roles

including educator, evaluator, inspirer, mentor, buddies, counselor, and primary teacher.

Defining the Role. In an effort to characterize the DI preceptor role, Wilson (2002) examined the opinions of 265 preceptors participating in DIs, approved preprofessional practice programs, and coordinated programs in dietetics from across the United States. Perceptions concerning the role of preceptor were identified by surveying how often DI preceptors performed specific practices of the position at the present time versus how frequently they thought they should perform certain tasks.

Participants completed a 70-item questionnaire comprising the Preceptor Typology developed by the author. The Preceptor Typology was designed to help define the concept of preceptor by distinguishing the functions of preceptors from those of teachers and mentors. Three basic components of instruction—teaching, precepting, and mentoring—were represented categorically in the typology with distinct and shared elements. Preceptors were asked to indicate how frequently each activity was currently practiced and then to specify how often they believed they should perform each item.

Responses to the questionnaire revealed that DI preceptors perceived their role to involve a wide range of functions. For each of the five categories delineated in the Preceptor Typology: teacher, preceptor-teacher, preceptor, preceptor-mentor, and mentor, participants reported practicing most of the items “frequently.” More preceptors (93%) frequently viewed themselves as

a professional role model from the preceptor category than as an academic role model from the teacher category (74%) or as a personal role model from the mentor category (62%). Of all the descriptors, the role of mentor was least likely to be carried out by preceptors. Activities in the mentor category received the largest percentage of preceptors indicating “seldom or never.”

Role Expectations. Although preceptors perceived their position to be broad, encompassing a variety of responsibilities associated with the roles of teacher, preceptor, and mentor, 84% of preceptors indicated they had an excellent or good understanding of the role and 72% of preceptors believed their expectations were communicated clearly (Wilson, 2002). Appropriate awareness of role expectations may explain the responses to the second set of questions in the questionnaire in which preceptors indicated little change was needed with how they execute the role of preceptor. Participants felt they should practice most items at “about the same” frequency as they do presently. Conversely, in a nationwide survey examining preceptor’s perceptions about the role, participants rated the statement regarding their responsibilities as a preceptor being clearly defined relatively low and less favorably than several other items of support for preceptors (Marincic & Francfort, 2002).

Attributes and Skills of Effective Preceptors

Although there is little consensus on the established definition of a preceptor, effective preceptors tend to exhibit common personal attributes. A review of the allied health literature by Gates and Cutts (1995) concluded that

preceptors who are effective teachers demonstrate three key qualities: good interpersonal skills, the ability to evaluate interns effectively, and the ability to serve as an appropriate resource person for students.

Interpersonal Skills. Based on student perceptions of successful preceptors, interpersonal skills ranked as the most valuable characteristic in the review by Gates and Cutts (1995). Specifically, an enthusiasm for teaching, respect and confidence in students, friendliness toward students, and a genuine interest in patient care were cited as interpersonal skills a preceptor should have. Recent graduates from a dietetics program and dietetic faculty participating in a focus group study by Taylor et al. (2010) agreed with these essential interpersonal skills, stating that DI preceptors should demonstrate a willingness and desire to precept. The faculty felt that an individual who wants to be a preceptor will put forth the extra time and effort needed to be successful. They also believed that an effective preceptor must have a desire to give back to the dietetics profession and respect for the student. Being a strong advocate for the profession was reported by 10 of 15 DI preceptors participating in an online questionnaire to be an attribute that enabled them to be an effective preceptor (Ortman & Arsenault, 2010).

Intern Evaluation. The ability to effectively evaluate a student's progress is one of the more challenging attributes of a successful preceptor (Gates & Cutts, 1995). Evaluating interns comprises a considerable part of the preceptor role. In a survey examining the current practices of 265 DI preceptors, 76% of preceptors indicated they gave interns an evaluation of

professional progress “frequently” and 71% of preceptors reported they facilitated interns’ awareness of strengths and weaknesses “frequently.” Recent dietetic graduates in a study by Taylor et al. (2010) thought regular verbal feedback with constructive criticism and encouragement was a skill that preceptors should demonstrate. Eighteen preceptors participating in the Iowa State University Dietetic Internship agreed that timely descriptive feedback on a regular basis was essential (Kruzich et al., 2003). In the review by Gates and Cutts (1995), allied health professionals added that feedback should be specific including comments about the student’s skills, strengths and weaknesses, abilities, and knowledge. Interns reported in this review that preceptors should offer suggestions for improvement, acknowledge them when they perform well, and be honest and direct. Dietetic faculty members in Taylor et al. (2010) agreed and felt preceptors should be genuine and honest when giving feedback to interns.

Resource Person. Serving as a resource for interns is an additional skill vital for precepting effectively. Faculty from a dietetic program shared during a focus group discussion that preceptors should have self-confidence, good communication skills, and a strong clinical knowledge (Taylor et al., 2010). Allied health practitioners supplemented these attributes by stating that preceptors should be able to effectively communicate their knowledge, the rationale behind their actions and decisions, and encourage students to ask questions or ask for help when needed (Gates & Cutts, 1995). The faculty members in the study performed by Taylor et al. (2010) conveyed that good

DI preceptors encourage critical thinking by employing effective questioning techniques. Stated in the review of allied health by Gates and Cutts (1995), preceptors should allow students to be self-sufficient, finding information and solving problems on their own, yet be accessible and provide guidance when needed. Former dietetic interns expressed a desire for preceptors to allow students to develop a more personal approach to patient care (Taylor et al., 2010). It was suggested that as a resource person, preceptors should model technical skills and workload organization (Gates & Cutts, 1995) and provide hands-on coaching (Taylor et al., 2010) for the interns. In a study by Ortman and Arsenault (2010), DI preceptors were asked to describe the characteristics that helped them to be effective preceptors. Communication skills, flexibility, problem-solving abilities, leadership, time management skills, and experience were reported by participants as valuable skills to be a successful preceptor.

Training and Support Needs of DI Preceptors

Ongoing support is needed for preceptors to continue and remain committed to the preceptor role (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Taylor et al., 2010; Usher et al., 1999). Support in the forms of training, communication, and support systems are desirable to meet the needs and expectations of DI preceptors.

Training. Training is a valuable support for preceptors to enhance their teaching strategies and skills, ensuring effective preceptors for

continued quality dietetic education. Development of preceptor skills needs to be a continual practice to sustain an effective program (Usher et al., 1999).

Lack of training. There is little formal instructional training in place for DI preceptors (Taylor et al., 2010). The fact that preceptors were mostly untrained was surprising to recent graduates of a dietetics program (Taylor et al., 2010). The lack of training available for DI preceptors was recognized in an online study by Ortman and Arsenault (2010) in which only one of 15 preceptors reported receiving any instruction regarding the preceptor role and seven of 15 preceptors indicated receiving no training at all. The results of a study by Marincic and Francfort (2002) concur in which merely 10% of 116 DI preceptors received formal training for the role, 32% of participants received informal training, and 58% of preceptors did not receive any instruction for the position. In a survey involving 265 DI preceptors from across the United States, 30% of participants reported participating in formal preceptor training and 88% of participants thought training materials would be helpful (Wilson, 2002). When asked to rate their perceptions of support for the preceptor role, participants of the Marincic and Francfort (2002) survey typically gave low scores to the statement regarding having adequate preparation for the role relative to other areas of support. DI Preceptors in a focus group discussion revealed that without having any formal training, they were likely to teach interns in the same way they were taught by their preceptors (Taylor et al., 2010). Similarly, six of 15 DI preceptors reported

that their own personal internship and preceptor experiences influenced the manner in which they precepted (Ortman & Arsenault, 2010).

Training needs. To determine the training needs and support requirements of DI preceptors, Taylor et al. (2010) performed a study involving semi-structured focus groups and individual interviews with 31 clinical DI preceptors, former students, and faculty from a large metropolitan area in the United States. From these discussions, several areas of desired training were identified, such as time management, active listening, basic instructional principles, learning styles, and adult learning principles. DI preceptors in the study by Ortman and Arsenault (2010) also requested instruction on student learning styles. In addition, they wanted resources on preceptor roles and how to complete forms as well as training sessions with practical examples. Similar results were observed in a qualitative study of nurse preceptors who stated that they wanted additional training clarifying the preceptor's role and expectations (Stevenson et al., 1995). Techniques for providing feedback to interns, coaching, using active questioning to challenge students, setting expectations, soliciting information from interns, dealing with problem students, and teaching professionalism were also cited by DI preceptors as training needs (Taylor et al., 2010).

It was the opinion of DI preceptors in Taylor et al. (2010) that tools including manuals with reference materials and workshops or seminars lasting one to two hours would be the most beneficial formats for training. They also thought awarding continuing education units (CEUs) for attending

training sessions would provide motivation. Preceptors participating in a study by Kruzich et al. (2003) believed that CEUs facilitated networking among other preceptors and enhanced professional growth. In the Ortman and Arsenault (2010) study, preceptors suggested that more user-friendly versions of manuals and documents in both hard copy and electronic formats would be helpful in their role as preceptor. It was also expressed by DI preceptors that they wanted to contribute to the development of training materials (Taylor et al., 2010).

Professionalism. As part of their responsibilities, clinical preceptors in the study performed by Taylor et al. (2010) reported they instruct interns about professional standards in the hospital, respect for other practitioners, and the rules of the facility. However, they thought dietetic professionalism was a broad area in which more training would be beneficial, particularly in handling students with poor attitudes. Preceptors expressed an interest in a general reference book that provided guidelines for dealing with challenging situations and disciplinary actions for minor problems such as tardiness or laziness.

DI preceptors in the focus group study by Kruzich et al. (2003) felt frequent timely feedback on an intern's performance by the preceptor was essential for the intern's professional development. Recent graduates from a dietetics program agreed and believed that direct feedback brought immediate attention to the inappropriate behavior which otherwise may have been overlooked (Taylor et al., 2010). These former students thought

that conflicts over professional behavior and attire occurred at times because of a generation gap between preceptors and interns.

Communication. Open communication between preceptors and interns, faculty, and other preceptors promotes a successful preceptorship.

Intern and preceptor. Communication throughout the internship in terms of preceptor feedback to students regarding their performance has been cited as desirable for a successful preceptorship (Gates & Cutts, 1995; Kruzich et al., 2003; Taylor et al., 2010). Likewise, preceptors for dietetic interns (Kruzich et al., 2003) and nurses (Stevenson et al., 1995) stated that they wished to receive feedback from students evaluating their effectiveness as preceptors to improve their teaching skills.

In the focus group study by Taylor et al. (2012), information exchange between the intern and preceptor during initial introductions was identified as a concern among participants. The preceptors expressed a need for more specific information about an intern's competence level and knowledge at the start of the internship in addition to the basic information provided about the program. Having this information, according to the preceptors, would enable them to modify their instruction to better match the needs of the student and teach more effectively. The former students in this study were equally concerned that preceptors were uninformed about the intern's skill set. To amend this situation, they suggested a more thorough assessment of the intern's capabilities by preceptors and for students to have an opportunity to

tell preceptors about themselves and their expectations at the beginning of the rotation.

Faculty and preceptor. In addition to more information exchange between students and preceptors, Hill et al. (1999) concluded in a study of allied health clinical instructors that faculty should also communicate with preceptors at the start of the internship about the student's competencies and preparedness. A clear outline of objectives and goals should be included in this communication to assist preceptors with instructing interns (Hill et al., 1999).

In the study by Kruzich et al. (2003), DI preceptors reported feeling somewhat disconnected to the faculty involved in the internship. They reported face-to-face interaction to discuss intern performance was limited to occasional site visits. Additionally, several preceptors felt there was little communication with faculty about meeting intern and faculty expectations. DI preceptors participating in the online study by Ortman and Arsenault (2010) agreed and felt it would be helpful to receive feedback from the university faculty about whether they are meeting interns' needs. Supports including various communication media, WebCT, training videos, and website materials were available to assist preceptors with their role, yet several of these aids, particularly WebCT, were underutilized by preceptors (Kruzich et al., 2003; Ortman & Arsenault, 2010). Seven of 16 participants in the study by Kruzich et al. (2003) indicated they had utilized resources from WebCT. In the study performed by Ortman & Arsenault (2010), only four of

15 preceptors reported program supports were effective overall in assisting with precepting. Monthly conference calls and additional on-site meetings were suggested by DI preceptors to enhance communication between the university faculty and preceptors (Ortman & Arsenault, 2010).

Among preceptors. Communication between preceptors at separate facilities was reported by preceptors of the Iowa State University Dietetics Internship to take place primarily during preceptor workshops (Kruzich et al., 2003). In a nationwide survey examining preceptors' perceptions of support regarding the preceptor role, participants ranked the statement about adequate opportunities to share information with other preceptors considerably lower than several other support items (Marincic & Francfort, 2002). To facilitate networking and communication among DI preceptors, newsletters providing a list of all preceptors (Ortman & Arsenault, 2010), online chat rooms, e-mail list-serves, and regional preceptor workshops were suggested by preceptors (Kruzich et al., 2003).

Support Systems. In a survey of 116 preceptors from 20 randomly selected accredited DIs and preprofessional practice programs across the United States, perceptions of support systems associated with the preceptor role were examined by Marincic and Francfort (2002). Participants of this study viewed support for the preceptor role significantly less favorably than either perceived benefits or commitment to the position. However, preceptors felt their immediate supervisors were supportive and understood their role as preceptor and the facility administration was supportive of the

internship program. Conversely, low scores were given for support from the DI director or clinical coordinator with respect to assisting with identifying an intern's performance problems and developing in the preceptor role. Similar perceptions were observed in a study involving nurse preceptors who stated that additional guidance for the preceptor in matters such as handling personality conflicts or lack of intern progress would make the preceptor role more attractive (Stevenson et al., 1995). The more support preceptors perceived to be associated with the preceptor position in the survey by Marincic and Francfort (2002), the more committed they were to the role ($r=0.495$; $P<.0010$). These findings agree with those reported in similar studies performed with nurse preceptors in Canada (Dibert and Goldenberg 1995, Hyrkäs and Shoemaker 2007) and Australia (Usher et al 1999).

Intern Performance and the Learning Environment

The supervised practice component of dietetics education provides the practical training needed for dietetics students to develop into competent practitioners. Not all internship experiences are successful, however, due to poor performance by interns or underdeveloped skills of preceptors (Lordly, 2007).

Intern Attributes. Upon entry into the internship, dietetic interns are expected to have a certain level of professional and personal skills. In a study performed by Ortman and Arsenault (2010), DI preceptors from the Mount Saint Vincent University Internship Education program were asked to

describe the skills and qualities of dietetic interns that facilitate their success in the internship. Participant responses included good interpersonal communication skills, independence, self-motivation, time-management and organizational skills, flexibility, leadership skills, confidence, and a passion for health and nutrition. Similar responses were observed in a study of preceptors from the Central Michigan University Dietetic Internship in which professional behavior and the ability to ask relevant questions were also cited as desirable characteristics (Jay & Hoffman, 2000). These expectations of interns are consistent with those reported by allied health clinical instructors (Hill et al., 1999). Participants of the Central Michigan University study perceived the above-mentioned attributes to be more valuable for the beginning intern than technical skills (Jay & Hoffman, 2000). Conversely, 89% of the allied health preceptors reported that they expected interns to have some technical skills when entering the clinical setting (Hill et al., 1999).

Poor Performance. The perspectives of 23 internship directors and university course directors from across Canada concerning the performance issues of dietetic interns were investigated via an electronically distributed survey with open-ended questions (Lordly, 2007). Participants of this study indicated a range of problems associated with difficult students spanning personal, learning, relationship, professional, and performance issues. Of the 23 participants, 14 (61%) reported facing at least one challenging student each year. Allied health preceptors in the study performed by Hill et al.

(1999) described negative student behaviors as the most frustrating precepting experiences. Comparably, 79% of the difficulties with interns reported by dietetic professionals in the study performed by Lordly (2007) were due to poor behavior or attitude. Only 13% of the issues were related to lack of knowledge and 8% of the problems were related to lack of skills (Lordly, 2007). The poor conduct exhibited by challenging students involves an inability to apply appropriate knowledge or skill, bad attitude, inability to relate to others, low motivation, lack of independence, overconfidence, undesirable personal and professional behaviors, and lack of communication skills (Hill et al., 1999; Lordly, 2007). Of these behavioral issues, DI preceptors from the survey performed by Jay and Hoffman (2000) with the Central Michigan University Dietetic Internship thought that lack of motivation, poor attitude, and lack of communication skills would most hinder an intern's success in the internship.

Managing Challenging Interns. Preceptors are typically willing to put forth extra effort to help problematic students succeed (Lordly, 2007). However, a majority (55%) of the participants in the study by Lordly (2007) stated they would deal with a difficult student differently in the future. Most participants responded they would intervene earlier if a similar situation arose. With respect to managing challenging interns, dietetic professionals suggested that an opportunity to share information and learn from others who have had the same experience, formalized procedures for disciplinary actions, and training sessions or workshops involving specific performance

issues, interpersonal relations, evaluation methods, and conflict resolution would be beneficial (Lordly, 2007).

Student Stressors. Various stressors and life circumstances can contribute to an intern's poor performance (Lordly, 2007). An online survey examining students' perspectives on stressful situations in their educational environment involving 284 dietetics students and interns across Canada was conducted by Lordly and MacLellan (2008). The stressors most commonly reported by students involved getting a job as a dietitian, competing for an internship position, deciding on an area of dietetic practice, meeting program demands, and financial burden. In addition to the potential impact on a student's performance, the association of stressors with the dietetic program may adversely affect a student's decision to pursue a career in dietetics (Lordly & MacLellan, 2007).

Students expressed several other concerns regarding the DI program (Lordly & MacLellan, 2008). They felt the rigid internship structure and trying to arrange their lives around it was a source of stress, the evaluation process was punitive rather than supportive and lessened their learning and satisfaction of the internship, and the competitive nature of the internship selection process among students undermined the development of collaborative work required as professionals.

Effective Learning Environment. The manner in which students expect to be treated by educators and how they actually are treated appears to be diverging (MacLellan & Lordly, 2008). According to MacLellan and

Lordly (2008), dietetics students of today expect to be treated as equals by their preceptors and want to have a voice in their own education. In the focus group study performed by Kruzich et al. (2003), preceptors indicated that an effective learning environment should strive to build the intern's self-confidence, facilitate professional behaviors, provide exposure to various practice settings, and incorporate multiple learning styles in a safe environment. However, in the study performed by MacLellan and Lordly (2008), a major theme that emerged from analysis of the data was the existence of a "power over" hierarchical learning environment within dietetics education, which can result in conflict between the intern and preceptor. This type of learning environment tends to make students feel undervalued and unimportant as demonstrated by MacLellan and Lordly (2008). Students entering the program with prior work experience and professional competence may exacerbate the challenges between a preceptor trained in the hierarchical medical system and the intern (MacLellan & Lordly, 2008). To minimize conflict and stress during the preceptorship, MacLellan and Lordly (2008) suggest a 'student-centered' approach in which the preceptor is approachable and responsive to the needs of students.

Departmental Benefits Associated With Dietetic Interns

Dietetic internships are not only beneficial for the interns and preceptors, but they can be advantageous for the dietetics departments that sponsor them as well. The presence of dietetic interns in a department can have both financial and intangible benefits.

Net Intern Productivity. Conklin and Simko (1994) investigated the direct economic benefits for hospital dietetic departments participating in an internship program. The cost savings accrued to the dietetic departments by the professional labor of interns was measured as net student productivity. Net student productivity was calculated by subtracting the total time dietitians in the department spent teaching interns from the total time interns spent performing professional services without direct supervision. A teaching activity recording form and a learning activity recording form were completed by 143 precepting dietitians and 155 interns, respectively, from 43 hospital-based dietetic departments across the United States to log the time spent performing educational tasks. Total time was described as the number of hours spent in teaching or learning activities totaled over five consecutive days to represent a typical workweek.

For the hospitals studied, dietitians spent a mean of 37.3 ± 18.8 hours per department throughout the workweek instructing dietetic interns. This corresponds to 0.93 of a full-time equivalent (FTE) dietitian. Dietetic interns spent a mean of 66.5 ± 42.6 hours per department during the week performing independent professional responsibilities, which represents 1.66 FTE of dietitian labor. The mean net student productivity for all the dietetic departments was 29.2 ± 35.7 hours per standard workweek, representing an average net gain of 0.73 FTE of professional labor for each department.

Gains Versus Losses. In another study performed by Conklin and Simko (1995), 231 preceptors from the dietetics departments of hospitals throughout the United States were asked to assess the overall benefit to the department as a result of the presence of dietetic interns. A majority of the dietitians (60%) felt the department gained from sponsoring an internship program, 35% thought the department broke even, and 4% believed the department lost as a result of the internship program. These results are consistent with those found in a survey of 55 DI preceptors from the Central Michigan University Dietetic Internship, of which 55% of respondents believed the department benefited and 45% thought the department broke even from teaching interns (Jay & Hoffman, 2000). A study involving 312 DI preceptors from hospitals across the United States had similar findings. Although more preceptors (48%) thought the department broke even, 44% of participants felt the department gained from the internship. Only 4% of DI preceptors believed the department lost as a result of participating in the internship program (Gilbride & Conklin, 1996).

The opinions of preceptors regarding the overall advantages to the dietetics department from sponsoring an internship may be undervalued in these studies. Based on net student productivity, 81% of the hospital-based dietetics departments in the Conklin and Simko (1994) study gained from the presence of dietetic interns and only 19% of the departments revealed losses associated with the internship program. However, the authors pose the case that the quality of the 1.66 FTE of student labor provided to the department

may not be equivalent to the 0.93 FTE of dietitian labor used for teaching thereby overstating the accrued benefits.

Free Labor. DI preceptors typically consider interns an asset to the organization. For the preprofessional services that the interns donate to the dietetics department, 71% of preceptors in Conklin and Simko (1995) and 60% of preceptors in Gilbride and Conklin (1996) were willing to pay interns a wage equal to or greater than the salary of a dietetic technician with less than five years experience. The most frequently cited professional activities performed independently by interns included giving dietary counseling and nutrition education to patients (48%), charting medical records 32%), and conducting nutrition assessments and writing care plans (24%) (Conklin & Simko, 1994). In a focus group study of recent graduates of a dietetics program, some participants felt that preceptors regarded them as free labor. They all agreed, however, that despite not being employees they should assist the departments as necessary (Taylor et al., 2010).

Although students typically provide unpaid services to the dietetics department during the internship, the experience may lead to future employment with the organization. In a study by Jay and Hoffman (2000), 69% of DI preceptors reported that their facility makes job offers to former interns and 65% of participating facilities employed program graduates. The potential to recruit interns as future employees is advantageous to facilities participating in the internship program (Kruzich et al., 2003). Hiring former students benefits the dietetics department by reducing the time required for

orientation and training by a mean of 3.0 ± 1.8 weeks (Jay & Hoffman, 2000).

Staff Relief. The direct economic benefits for hospital-based dietetic departments as a result of participating in an internship were also measured by Conklin and Simko (1994) as the total time spent by interns in staff relief rotations. A questionnaire was administered to the managers of 45 dietetics departments asking about the use of interns during staff relief. All of the departments gained from the preprofessional labor of students by affording release time for dietitians to perform alternative tasks. The median number of weeks per year spent in staff relief by interns was 24. Relieving dietitians on vacation was reported by 42% of departments as by far the most frequent use of interns during staff relief.

Intangible Benefits. In addition to the economic benefits of dietetics departments by the presence of interns, there are also nonmonetary benefits associated with the internship. In an online questionnaire involving 15 DI preceptors from the Mount Saint Vincent University Internship, participants were asked to describe the benefits to their organization from serving as a DI preceptor (Ortman & Arsenault, 2010). Fourteen of the 15 preceptors in the study responded that projects and assignments completed by the interns were valuable to the department. Participants also expressed that the professional service of interns allowed them to accomplish tasks that would likely not get completed otherwise due to limited budgets and time. An

intangible benefits scale associated with teaching interns was used in three separate studies to assess the perceptions of DI preceptors (Conklin & Simko, 1995; Gilbride & Conklin, 1996; Jay & Hoffman, 2000). Although regarded not as highly as personal rewards by preceptors, benefits to the departments were reported. Among the most favorably ranked intradepartmental benefits for all three studies were intern projects conducted in this facility are useful to the department, interns bring new ideas to the department, and supervising interns has increased my awareness of current research in nutrition and dietetics. The top-ranked interdepartmental benefits reported in these surveys included interns make other professionals more aware of our department and a DI program adds status to this department. It appears that intangible and tangible rewards for participating in the internship are both needed for the continuation of a successful DI program.

Personal Rewards of Precepting and Commitment to the Role

There are few monetary rewards for precepting and dietetics professionals perform the role with little or no compensation (Taylor et al., 2010). Only 8% of DI preceptors reported receiving any tangible benefits for precepting (Marincic & Francfort, 2000). However, a review of the literature revealed that intangible rewards such as observing interns develop as professionals, gaining a sense of achievement and satisfaction, teaching students, professional growth, contributing to the profession, and being recognized as a role model were key to preceptors' satisfaction and continued service in the role.

Intern Professional Development. DI preceptors expressed a sense of satisfaction from seeing the interns develop as professionals and ranked this item most favorably as a professional benefit associated with the role of preceptor in three studies investigating the perceptions of DI preceptors (Conklin & Simko, 1995; Gilbride & Conklin, 1996; Jay & Hoffman, 2000). Similarly, nurse preceptors in a qualitative study indicated observing the preceptee grow as a reward of precepting (Stevenson et al., 1995) and 41% of allied health professionals reported observing student growth as the most rewarding part of the role (Hill et al., 1999). DI preceptors also ranked assisting students in applying their knowledge very highly in terms of professional benefits from precepting (Marincic & Francfort, 2002). Nurse preceptors agreed, and in three similar studies of preceptors' perceptions, assisting students to integrate into the nursing unit was ranked as the top or second highest reward associated with serving as a preceptor (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Usher et al., 1999)

Sense of Satisfaction and Achievement. Gaining personal satisfaction from the role was indicated as an additional benefit of precepting by both nurse preceptors and DI preceptors (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Usher et al., 1999). The DI preceptors ranked this item higher on the list of perceived rewards than the nurse preceptors in these studies. DI preceptors also described getting a real sense of achievement when working with interns (Conklin & Simko, 1995; Gilbride & Conklin, 1996; Jay & Hoffman, 2000).

Teaching Students. Teaching students was cited as a rewarding experience for preceptors in nursing, allied health, and dietetics fields (Dibert & Goldenberg, 1995; Hill et al., 1999; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Usher et al., 1999). DI preceptors indicated that sharing knowledge and skills with students was the most gratifying aspect of precepting (Marincic & Francfort, 2002). Nurse preceptors also perceived sharing expertise and knowledge with students as a major benefit to the role (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Stevenson et al., 1995; Usher et al., 1999). In agreement, DI preceptors and nurse preceptors felt that training interns improved their teaching skills (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Stevenson et al., 1995; Usher et al., 1999). DI preceptors also believed that teaching interns made their job much more interesting (Conklin & Simko, 1995; Gilbride & Conklin, 1996; Jay & Hoffman, 2000).

Preceptor Professional Growth. Professional growth was widely reported in the literature as a personal reward for assuming the preceptor role. Most commonly, preceptors from the nursing and dietetics professions reported enhancing their professional knowledge base as a result of working with interns (Conklin & Simko, 1995; Dibert & Goldenberg, 1995; Gilbride & Conklin, 1996; Hyrkäs & Shoemaker, 2007; Jay & Hoffman, 2000; Kruzich et al., 2003; Marincic & Francfort, 2002; Ortman & Arsenault, 2010; Stevenson et al., 1995; Usher et al., 1999). Preceptors also indicated that the presence

of interns keeps them current and stimulated in the dietetics or nursing profession (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Kruzich et al., 2003; Marincic & Francfort, 2002; Stevenson et al., 1995; Usher et al., 1999). Additionally, the fresh outlook and new ideas brought by students were perceived as benefits of training interns by nurse and DI preceptors (Ortman & Arsenault, 2010; Stevenson et al., 1995). Allied health professionals also indicated that it was rewarding when the student encouraged them during the preceptorship (Hill et al., 1999).

Contributing to the Profession. Being able to contribute to the profession was reported by DI preceptors and nurse preceptors as a reward associated with the preceptor position (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Stevenson et al., 1995; Usher et al., 1999). Although, the DI preceptors ranked this benefit considerably higher than the nurse preceptors. DI preceptors also expressed great pride in helping the profession by precepting (Taylor et al., 2010), and nurse preceptors and DI preceptors were proud to tell others they were mentors (Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002). The DI preceptors ranked having pride in the position much higher than the nurse preceptors, however. Even without receiving any compensation, some DI preceptors participating in a focus group discussion felt that mentoring interns was a professional responsibility (Taylor et al., 2010). Both the Academy and Dietitians of Canada encourage dietitians to give back to the profession by precepting (Ortman & Arsenault, 2010; Taylor et al., 2010). In a qualitative

study involving nurse preceptors, a participant felt that because she had been precepted she was obligated to precept students in return (Stevenson et al., 1995). Recent dietetic graduates participating in another focus group indicated they appreciated having been precepted and would contribute to the profession by mentoring interns in the future (Taylor et al., 2010).

Role Model. Being recognized as a role model was rewarding to DI preceptors and nurse preceptors (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Usher et al., 1999). Nurse preceptors felt it was an honor to be asked to precept students and that it increased their self-esteem (Stevenson et al. 1995).

Commitment to the Role. A survey of 116 preceptors from 20 randomly selected accredited dietetic internships and preprofessional practice programs across the United States found a positive correlation ($r=0.68$; $P<.001$) between perceived benefits and rewards of precepting and preceptors' commitment to the role (Marincic & Francfort, 2002). This finding parallels those reported in similar studies involving nurse preceptors in Canada (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007) and Australia (Usher et al., 1999). The study performed by Marincic and Francfort (2002) examining the perceptions of DI preceptors' commitment to the role revealed that preceptors are clearly dedicated to the position and the internship program. In terms of commitment to the DI program, preceptors indicated they felt loyalty to the program and cared about its fate. In terms of the preceptor role, participants indicated that being a preceptor inspired

them to perform their very best, they were willing to put in a great deal of effort beyond what is normally expected in order to help the intern be successful, and they believed that agreeing to be a preceptor was definitely not a mistake. Similar responses were observed in a comparable study involving nurse preceptors (Hyrkäs & Shoemaker, 2007). Preceptors also disagreed with the statement that in their next professional position they would look for a job where they do not have to teach students (Conklin & Simko, 1995; Gilbride & Conklin, 1996; Jay & Hoffman, 2000).

Disadvantages of the Preceptor Role

Several disadvantages associated with assuming the role of preceptor have been cited in the literature. The time constraints of taking on an intern were overwhelmingly described as a major drawback of the position (Hill et al., 1999; Kruzich et al., 2003; Ortman & Arsenault, 2010; Stevenson et al., 1995; Taylor et al., 2010). Additional aspects involving increased responsibilities, dealing with interns, and lack of support have also been cited as difficulties of precepting.

Time Constraints. Preceptors devote a substantial amount of time and effort to the preceptor role (Stevenson et al., 1995). Indeed, DI preceptors have been reported to spend an average of slightly more than one hour each day (Conklin & Simko, 1995) to nine hours per week working with interns (Marincic & Francfort, 2002). Clinical DI preceptors in the study by Conklin and Simko (1995) stated they typically supervised one intern (72%) at a time, but some oversaw as many as four interns simultaneously. DI

preceptors participating in various focus group discussions voiced concerns regarding the extra time demands associated with training interns (Kruzich et al., 2003; Taylor et al., 2010). Similarly, nurse preceptors indicated that it took longer to accomplish tasks and care for patients when supervising interns (Stevenson et al., 1995). These preceptors also noted that tasks such as paperwork were often not completed due to the time spent with the intern. DI preceptors participating in the survey performed by Marincic and Francfort (2002) agreed, and of all the items listed in the support category having adequate time to provide patient care or perform foodservice management responsibilities while precepting was ranked the least favorably. Students also felt lack of time was an issue during the preceptorship (Taylor et al., 2010). They wanted more feedback than their preceptors had time to give and were frustrated when they had to stay late because of unfinished work. Of course the preceptors felt their work did not get finished at times because the intern was with them all day (Taylor et al., 2010). A participant in the study performed by Ortman and Arsenault (2010) thought the time cost associated with having an intern was offset by the projects the intern completes.

Increased Responsibilities. Precepting is an added responsibility for practitioners and some find it challenging to take on the extra duties associated with the role (Hill et al., 1999; Ortman & Arsenault, 2010)). Indeed, nurse preceptors reported experiencing more stress with taking on an intern and the associated obligations (Stevenson et al., 1995). Additional

paperwork was cited as a disadvantage of precepting by DI preceptors and nurse preceptors (Ortman & Arsenault, 2010; Stevenson et al., 1995). DI preceptors reported most of their time teaching interns was spent performing administrative activities including preparing, scheduling, and evaluating (Conklin & Simko, 1995). Although some preceptors have indicated that interns contribute to easing their workload (Ortman & Arsenault, 2010), a relatively low score was given for the statement regarding carrying an appropriate workload while functioning as a preceptor by DI preceptors (Marincic & Francfort, 2002). Though DI preceptors rated this statement more favorably than nurse preceptors (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Usher et al., 1999). According to nurse preceptors, interns gradually take on more patient care as they progress, easing the workload. However, some nurse preceptors reported losing this hands-on care as a negative of training interns (Stevenson et al., 1995).

Interns. The interns themselves were also cited as a possible downside of serving as a preceptor, particularly if they had to deal with challenging and difficult students (Hill et al., 1999; Lordly 2007). Another complaint was made about the lack of preparedness of some interns entering the internship (Ortman & Arsenault, 2010). The generation gap between students and educators was also recognized as a problem at times (Lordly & MacLellan, 2008; Taylor et al., 2010).

Lack of Support. Another disadvantage mentioned by preceptors was not receiving adequate support while precepting. DI preceptors cited

lack of communication as a negative aspect of the role (Ortman & Arsenault, 2010). Both DI preceptors and allied health preceptors felt that a poor relationship with the educational institution caused difficulty in the position (Hill et al., 1999; Kruzich et al., 2003). DI preceptors thought coordinating and planning with program faculty, other preceptors, and facility staff could be challenging and time consuming (Kruzich et al., 2003). A lack of resources was also reported by DI preceptors as a downside of the role (Ortman & Arsenault, 2010). Allied health professionals mentioned facility limitations such as insufficient space and a shortage of patients to be frustrating situations associated with the role (Hill et al., 1999). Additionally, nurse preceptors cited receiving no recognition from management in terms of a positive impact on performance evaluation or financial rewards as a disadvantage of the role (Stevenson et al., 1995). DI preceptors also expressed a desire to be recognized for their contribution and suggested this could be accomplished with thank-you cards or certificates (Ortman & Arsenault, 2010). Additionally, allied health professionals affirmed it was a rewarding experience to be acknowledged by interns (Hill et al., 1999).

Chapter 3

METHODS

Research Design

A descriptive study was conducted to examine the perceptions of practitioners within the nutrition and dietetics field about motivators and barriers to serving as a DI preceptor.

Participants

The target population for this study included all current or past DI preceptors and individuals eligible to serve as DI preceptors throughout Arizona. With permission from the Academy of Nutrition and Dietetics (Academy), an email invitation with the online survey link was sent to all individuals with the RD or Dietetic Technician, Registered (DTR) credential from the Commission on Dietetic Registration (CDR) and registered in Arizona. A second email invitation and link was sent to individuals associated with School Food Service and eligible to serve as DI preceptors with permission from the Arizona Department of Education. Of the 2696 eligible subjects, 2497 were contacted to participate in the survey between June and September of 2011. Participation in the survey was voluntary and completion of the survey indicated consent. This study was deemed exempt by the Arizona State University Institutional Review Board. Documentation is in Appendix A.

Instrument

The survey instrument was developed from review of current literature, responses obtained from telephone interviews with DI preceptors, non-preceptors, and internship directors in Arizona, and questions adapted with permission from the authors of previous surveys exploring similar issues with DI preceptors (Jay & Hoffman, 2000; Marincic & Francfort, 2002).

As part of the formative analysis to explore perceptions about the role of DI preceptor in Arizona, 20 current DI preceptors, non-preceptors, and internship directors were interviewed by telephone. Open-ended questions were asked regarding incentives and obstacles associated with being a preceptor and about interactions with interns in this role. Themes identified from these interviews were integrated with common themes found in the literature and previous questionnaires to formulate the pilot survey questions.

A panel of 16 dietetic educators, university faculty members with RDs, and MS graduate students in dietetics evaluated the content, design, and readability of the initial instrument in paper and pencil format. Suggested improvements were incorporated into an online questionnaire. The online survey was pilot-tested once among a sample of 24 RDs and practicing preceptors in Arizona and out of state. After minor revisions, a second pilot test was done with 10 individuals from the original pilot panel of 16. Comments from these pilot tests were evaluated and used to further refine and develop the final survey.

The final instrument contained questions that measured the opinions of being a DI preceptor grouped according to common themes that emerged from previous published research, qualitative interviews, and pilot testing. These included: personal satisfaction, facility support, knowledge exchange, and interactions with the interns. For these questions, a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree was used to score individual items. The questionnaire also collected data regarding the respondents' awareness of serving as and becoming a DI preceptor, current precepting opportunities, and incentives to mentor interns. Characteristics of respondents, such as demographic information, employment setting, and years of practice were also gathered. The full questionnaire is in Appendix B.

Data Collection

The survey was administered online via SurveyMonkey for subjects with a valid email address. In an effort to increase response rate among participants, three reminder emails to complete the survey were sent approximately 7-10 days apart. For individuals on the RD and DTR Arizona roster without an email address or with an invalid email address, a letter requesting participation in the online survey was mailed to the address on file. Figure 1 shows the consort flow diagram for participants of the DI Mentor Survey.

Data Analysis and Variable Transformation

The online survey was completed by 766 participants for an overall response rate of 31%. Participants ineligible to precept including full-time students

(n=59) and retired individuals (n=32) were eliminated from the analysis. The remaining 675 study participants were characterized using descriptive statistics. Chi-square analysis was used to assess differences in characteristics between preceptors and non-preceptors for categorical variables including the Likert scale responses. Independent t-tests were used to analyze differences between groups for continuous variables such as age. All reported statistical tests were two-sided with significance set at $P < 0.05$. Statistical analyses were conducted using SPSS (version 20, IBM).

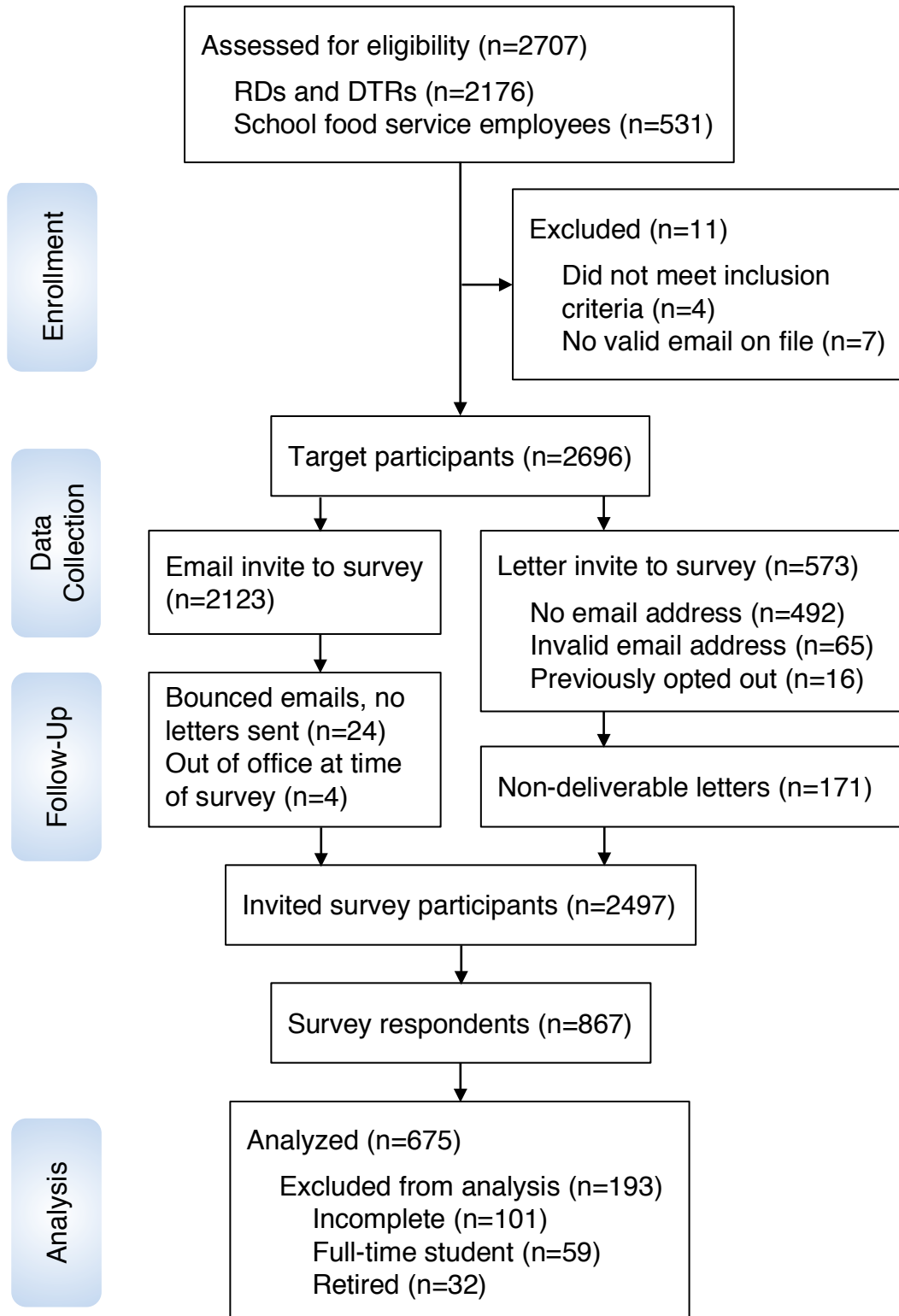


Figure 1. Consort flow diagram for participants of the DI Mentor Survey

Chapter 4

RESULTS

Respondent Characteristics

Of the 675 participants, 314 (47%) were current preceptors or have precepted dietetic interns in the past and 361 (53%) have never served as a preceptor. Demographic characteristics of the survey respondents are presented in Table 1. Respondents ranged in age from 19 to 75 years with a median age of 44 for both preceptors and non-preceptors. Participants were 94% female and 91% white with no significant differences in gender and race between the preceptor and non-preceptor categories. The highest level of education completed was significantly different between preceptors and non-preceptors. Nearly all preceptors (97%) had attained a bachelor's degree or higher compared with 84% of non-preceptors.

Table 2 shows the professional characteristics of the survey respondents. Significant differences between preceptors and non-preceptors were observed for employment in the field of nutrition and dietetics, membership with the Academy, holding RD, DTR, or neither of these credentials, and knowledge that preceptors could be other professionals besides RDs and DTRs. Respondents who currently serve or have served as DI preceptors in the past were more likely than those who have never served as DI preceptors to be currently employed in the nutrition and dietetics field, hold the RD credential, be a member or former member of the Academy, and to be aware that other professionals besides RDs and DTRs can serve as

mentors for dietetic interns. Interestingly, 58% of all respondents did not know that other professionals in addition to RDs and DTRs could serve as DI preceptors.

Preceptor Characteristics

Table 3 provides a description of preceptors in the profession. Of all the preceptor respondents, 55% currently serve as preceptors or directors and 45% have formerly served as preceptors or directors. The number of interns trained each year, total years mentoring dietetic interns, and weeks per year spent with each intern varied among preceptors. More facilities participate in local internships (66%) than distance internships (43%). Preceptors were asked whether they would stop precepting dietetic interns if it were completely up to them. Most preceptors (83%) answered they would continue to take interns.

Incentives and Barriers to Precept

A list of incentives that may encourage preceptors and non-preceptors to mentor interns are reported in Table 4. Both preceptors (70%) and non-preceptors (65%) indicated that continuing education units (CEUs) for their field was the most desired incentive for taking interns. Significantly more non-preceptors than preceptors ranked the ability to provide input on the intern selection process, the ability to choose when to take an intern, training on internship expectations, training on how to teach and communicate with the interns, and access to an “on-call” specialist for help or assistance with issues when they arise as motivators for mentoring interns.

Of all respondents who have never served as DI mentors, nearly half (46%) have thought about becoming a DI preceptor. However, only 18% were aware of how to become one.

Perceptions of Being a DI Preceptor

A series of Likert scale questions investigated the positive and negative perceptions of being a DI preceptor for current and past preceptors and those who have never mentored dietetic interns. Responses to the first group of questions exploring perceptions of personal satisfaction, self-efficacy, and knowledge are shown in Table 5. Preceptors answered these questions more favorably than non-preceptors with the greatest significance in the topics of being a preceptor contributes to the profession, believing they can be effective preceptors, caring about the fate of the dietetic internship program, and believing it is a professional duty to precept. The majority of preceptors (60%) strongly disagreed with the statement agreeing to be a preceptor was a definite mistake on my part as compared with 28% of non-preceptors.

Table 6 indicates the views of preceptors and non-preceptors regarding facility support for DI preceptors. Compared with those who have never served as preceptors, current and past preceptors were more likely to agree and strongly agree to questions about their immediate supervisors being supportive and understanding of their role as preceptor. Preceptors were more likely to disagree and strongly disagree with the statement the facility administration is NOT supportive of the internship program than

non-preceptors. Non-preceptors answered questions about an appropriate workload while precepting and adequate resources being available to assist with intern training significantly less positively than preceptors.

The next set of questions shown in Table 7 asked survey participants about their opinions concerning the interns. Most preceptors (81%) disagreed or strongly disagreed with the statement there is not enough for the interns to do at my workplace compared with less than half (47%) of non-preceptors. Preceptors viewed the usefulness of intern projects significantly more favorably than non-preceptors but were less likely to agree or strongly agree that intern projects decreased their workload. More preceptors than non-preceptors agreed and strongly agreed to questions about interns lacking the necessary technical skills and knowledge, interns not dressing properly for the workplace setting, and to some interns being 'know-it-alls'.

Responses to the perceptions of compensation and training for DI preceptors for current and past preceptors are shown in Table 8. The majority of preceptors agreed and strongly agreed that their responsibilities as a preceptor are clearly defined (57%) and that they had adequate preparation for the role (58%). Most preceptors (78%) agreed and strongly agreed that interns cause an increase in their workload while 93% of preceptors disagreed and strongly disagreed with receiving extra monetary compensation when they take interns and 62% do not believe being a preceptor improves their chances of promotion and advancement.

Table 1. Demographic characteristics of DI Mentor Survey respondents comparing current and former preceptors to non-preceptors

Characteristic	Total (n=675)	Preceptors (n=314)	Non- preceptors (n=361)
Age (mean±SD ^a)	44±12	45±12	44±13
Gender %(n)			
Male	6.1 (41)	4.5 (14)	7.5 (27)
Female	93.9 (632)	95.5 (299)	92.5 (333)
Education*** %(n)			
Associate degree or less	9.9 (67)	3.2 (10)	15.8 (57)
Bachelor's degree or higher	90.1 (607)	96.8 (303)	84.2 (304)
Hispanic, Latino, or Spanish origin %(n)	8.3 (54)	7.7 (23)	8.8 (31)
Race %(n)			
White	90.8 (592)	92.2 (273)	89.6 (319)
All other	9.2 (60)	7.8 (23)	10.4 (37)

^aSD=standard deviation.

***Significant at $P<.001$.

Table 2. Professional characteristics of current and past preceptors and non-preceptors from the DI Mentor Survey (n=675)

Professional Item	Total %(n)	Preceptors %(n)	Non- preceptors %(n)
Currently employed in nutrition/dietetics field*			
Yes	87.3 (589)	90.1 (283)	84.8 (306)
No	12.7 (86)	9.9 (31)	15.2 (55)
Academy ^a member***			
Yes	58.4 (393)	60.4 (189)	56.7 (204)
No	16.9 (114)	10.5 (33)	16.9 (114)
Former member	24.7 (166)	29.1 (91)	24.7 (166)
Credentials held			
RD***	75.9 (512)	92.4 (290)	61.5 (222)
DTR**	5.2 (35)	2.5 (8)	7.5 (27)
CDM	1.6 (11)	1.3 (4)	1.9 (7)
None of these***	16.4 (111)	3.8 (12)	27.4 (99)

Table 2. (continued)			
Professional Item	Total %(n)	Preceptors %(n)	Non- preceptors %(n)
Aware preceptors could be other professionals besides RDs or DTRs**			
Yes	41.8 (282)	48.1 (151)	36.4 (131)
No	58.2 (392)	51.9 (163)	63.6 (229)
^a Academy of Nutrition and Dietetics, formerly ADA *Significant at $P<.05$; **significant at $P<.01$; ***significant at $P<.001$.			

Table 3. Description of DI preceptors/mentors in Arizona (n=315)		
Preceptor Characteristic	%	n
Role as DI preceptor or director		
Current preceptor/director	54.9	173
Former preceptor/director	45.1	142
Facility participates in local internships		
Yes	65.7	207
No	17.1	54
Do not know/not applicable	17.1	54
Facility participates in distance internships		
Yes	43.3	135
No	36.2	113
Do not know/not applicable	20.5	64
Weeks per year spent with each intern		
1 week or less	18.2	57
2 weeks	15.0	47
3-4 weeks	15.0	47
5-6 weeks	10.2	32
7-8 weeks	12.7	40
9-12 weeks	9.6	30
More than 12 weeks	15.6	49

Table 3. (continued)		
Preceptor Characteristic	%	n
Total years mentored dietetic interns		
2 years or less	30.1	92
3-5 years	30.1	92
6-10 years	23.9	73
More than 10 years	16.0	49
Number of interns trained at facility each year		
1-2	32.7	101
3-4	29.4	91
5 or more	28.8	89
Do not know/not applicable	9.1	28
Would stop precepting interns if up to them		
Yes, I would stop taking interns	3.9	12
No, I would continue to take interns	82.7	254
Maybe, not sure	13.4	41

Table 4. Description of incentives that would encourage preceptors and non-preceptors to take an intern (n=675)

Incentive	%	n
Continuing education units (CEUs) for field		
Total	67.3	454
Preceptors	70.4	221
Non-preceptors	64.5	233
Pay for my time		
Total	48.1	324
Preceptors	49.8	156
Non-preceptors	46.5	168
Expenses paid to attend a national conference		
Total	51.0	344
Preceptors	53.2	167
Non-preceptors	49.0	177
Official reduction in workload while intern there		
Total	32.9	222
Preceptors	33.4	105
Non-preceptors	32.4	117

Table 4. (continued)		
Incentive	%	n
Ability to provide input on intern selection process**		
Total	27.7	187
Preceptors	22.0	69
Non-preceptors	32.7	118
Ability to choose when to take an intern(s)***		
Total	50.8	343
Preceptors	39.8	125
Non-preceptors	60.4	218
Training on the internship expectations***		
Total	44.3	299
Preceptors	36.9	116
Non-preceptors	50.7	183
Training on how to teach and communicate with interns***		
Total	37.2	251
Preceptors	26.4	83
Non-preceptors	46.5	168

Table 4. (continued)		
Incentive	%	n
Access to an “on-call” specialist for help or assistance with issues when they arise***		
Total	29.5	199
Preceptors	18.5	58
Non-preceptors	39.1	141
*Significant at $P<.05$; **significant at $P<.01$; ***significant at $P<.001$.		

Table 5. Perceptions of personal satisfaction, self-efficacy, and knowledge associated with being a DI preceptor for current and past preceptors and those who have never precepted (n=672)					
Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	%	%	%	%	%
I believe I can be an effective preceptor***					
Total	0.6	1.4	14.3	55.0	28.7
Preceptors	0.6	0.0	5.5	55.8	38.1
Non-preceptors	0.6	2.5	22.0	54.4	20.6
I believe it is a professional duty to precept***					
Total	1.2	6.7	20.7	41.6	29.7
Preceptors	0.6	1.9	9.9	46.8	40.7
Non-preceptors	1.7	10.9	30.2	37.2	20.1
Being a preceptor improves my teaching skills**					
Total	0.6	2.5	12.2	53.3	31.3
Preceptors	0.3	1.6	9.0	51.0	38.1
Non-preceptors	0.8	3.4	15.1	55.3	25.4

Table 5. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
Being involved in an					
internship program adds					
prestige to my job					
Total	1.3	9.5	35.4	39.9	13.8
Preceptors	1.0	7.7	36.9	40.7	13.8
Non-preceptors	1.7	11.1	34.2	39.2	13.9
When I work with interns, I					
get a real sense of					
achievement*					
Total	0.4	1.3	17.7	57.9	22.6
Preceptors	0.3	0.6	14.1	58.0	26.9
Non-preceptors	0.6	1.9	20.8	57.8	18.9
Being a preceptor contributes					
to my profession***					
Total	0.6	1.5	10.0	51.5	36.5
Preceptors	0.3	0.6	4.8	49.0	45.2
Non-preceptors	0.8	2.2	14.4	53.6	28.9

Table 5. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
Being a preceptor allows me					
to keep current and					
stimulated in my					
profession*					
Total	0.6	3.1	16.2	54.5	25.6
Preceptors	0.3	1.9	13.5	54.5	29.8
Non-preceptors	0.8	4.2	18.6	54.4	21.9
Agreeing to be a preceptor					
was a definite mistake on					
my part***					
Total	42.8	38.5	14.8	2.4	1.5
Preceptors	60.1	33.1	5.5	1.0	0.3
Non-preceptors	27.9	43.2	22.8	3.6	2.5

Table 5. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
I care about the fate of the dietetic internship program***					
Total	0.6	0.9	11.5	45.2	41.8
Preceptors	0.6	0.3	6.1	44.6	48.4
Non-preceptors	0.6	1.4	16.2	45.8	36.0
*Significant at $P<.05$; **significant at $P<.01$; ***significant at $P<.001$.					

Table 6. Perceptions of facility support for DI preceptors for current and past preceptors and those who have never precepted (n=657)

Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	%	%	%	%	%
Precepting students					
increases awareness of my practice area or specialty*					
Total	1.8	5.6	22.8	53.4	16.3
Preceptors	1.0	5.8	18.2	55.8	19.2
Non-preceptors	2.6	5.4	26.9	51.3	13.8
Being a preceptor provides an opportunity to screen potential employees and job recruit**					
Total	2.0	6.6	22.7	49.2	19.6
Preceptors	1.0	4.9	20.5	49.0	24.7
Non-preceptors	2.9	8.1	24.6	49.3	15.1

Table 6. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
My workload is appropriate					
when I function as a					
preceptor***					
Total	7.0	24.6	29.4	34.4	4.6
Preceptors	3.6	19.9	27.7	43.3	5.5
Non-preceptors	10.1	28.8	30.8	26.5	3.7
Intern activities have					
highlighted the functions					
of this department to					
administrators					
Total	3.5	13.3	41.4	35.0	6.7
Preceptors	2.3	14.1	45.1	31.6	6.9
Non-preceptors	4.6	12.6	38.2	37.9	6.6

Table 6. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
My immediate supervisors					
are supportive of my role					
as preceptor***					
Total	4.1	7.3	26.3	38.5	23.7
Preceptors	2.3	3.3	16.7	40.5	37.3
Non-preceptors	5.7	10.9	34.8	36.8	11.8
My immediate supervisors					
understand my role as					
preceptor***					
Total	3.1	6.6	25.8	45.9	18.7
Preceptors	1.6	5.9	20.6	47.1	24.8
Non-preceptors	4.3	7.2	30.5	44.8	13.2

Table 6. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
Adequate resources are available to assist with intern training***					
Total	5.0	18.0	32.3	36.8	7.9
Preceptors	2.3	14.6	26.0	46.4	10.7
Non-preceptors	7.4	20.9	37.8	28.4	5.4
The internship director schedules rotations at convenient times**					
Total	2.8	5.4	43.8	40.9	7.2
Preceptors	1.6	4.3	39.1	44.4	10.5
Non-preceptors	3.7	6.3	47.8	37.8	4.3

Table 6. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
The facility administration is					
NOT supportive of the					
internship					
Total	24.9	37.0	26.9	8.4	2.8
Preceptors	36.2	40.1	18.6	4.2	1.0
Non-preceptors	15.0	34.3	34.3	12.1	4.3
*Significant at $P<.05$; **significant at $P<.01$; ***significant at $P<.001$.					

Table 7. Perceptions regarding the dietetic interns themselves of current and past preceptors and those who have never served as a DI preceptor (n=666)

Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	%	%	%	%	%
My workplace or situation would not allow interns***					
Total	29.2	33.1	22.1	11.6	3.9
Preceptors	45.1	38.6	10.7	4.9	0.6
Non-preceptors	15.3	28.3	32.0	17.6	6.8
Interns conduct themselves in a professional manner					
Total	0.3	2.4	24.5	61.4	11.4
Preceptors	0.3	2.9	22.7	62.5	11.7
Non-preceptors	0.3	2.0	26.1	60.5	11.2
Interns bring new ideas to our department					
Total	0.8	4.7	25.2	57.7	11.7
Preceptors	0.6	6.1	24.3	55.7	13.3
Non-preceptors	0.8	3.4	25.9	59.4	10.4

Table 7. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
There is not enough for the interns to do at my workplace***					
Total	19.8	43.0	19.0	13.9	4.4
Preceptors	32.5	48.4	9.4	8.1	1.6
Non-preceptors	8.7	38.3	27.3	18.9	6.8
Intern projects decrease my workload*					
Total	7.1	37.2	38.1	15.7	2.0
Preceptors	5.8	43.0	37.2	12.3	1.6
Non-preceptors	8.2	32.1	38.9	18.6	2.3
Some interns lack the necessary technical skills and knowledge**					
Total	3.6	25.2	33.7	33.9	3.6
Preceptors	3.3	28.7	26.1	37.5	4.6
Non-preceptors	3.9	22.1	40.3	30.8	2.8

Table 7. (continued)					
Question	Strongly				Strongly
	disagree	Disagree	Neutral	Agree	agree
	%	%	%	%	%
Intern projects conducted in this facility are useful to the department**					
Total	1.5	5.4	30.2	51.7	11.2
Preceptors	1.0	2.9	27.7	54.1	14.3
Non-preceptors	2.0	7.6	32.4	49.6	8.5
Interns are difficult to relate to because of the generation gap					
Total	20.5	60.7	15.4	3.0	0.5
Preceptors	21.5	60.9	14.0	2.6	1.0
Non-preceptors	19.6	60.5	16.5	3.4	0.0
I worry interns will contradict me and my teaching**					
Total	21.6	59.4	16.2	2.1	0.8
Preceptors	25.4	61.9	10.4	1.6	0.7
Non-preceptors	18.3	57.2	21.1	2.5	0.8

Table 7. (continued)					
Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	%	%	%	%	%
Interns do not dress properly for the workplace setting**					
Total	12.4	53.2	27.9	5.4	1.1
Preceptors	10.5	52.9	26.5	8.5	1.6
Non-preceptors	14.0	53.5	29.1	2.8	0.6
Some interns are 'know-it-alls'***					
Total	9.0	35.2	32.9	19.2	3.6
Preceptors	7.8	38.6	24.4	23.7	5.5
Non-preceptors	10.1	32.2	40.3	15.4	2.0
Interns may make serious mistakes and cause patient/client harm**					
Total	12.3	54.7	28.6	4.1	0.3
Preceptors	15.6	54.2	23.7	6.2	0.3
Non-preceptors	9.6	55.1	32.9	2.2	0.3
*Significant at $P<.05$; **significant at $P<.01$; ***significant at $P<.001$.					

Table 8. Perceptions of compensation and training for DI preceptors for current and former preceptors (n=307)

Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	%	%	%	%	%
I receive extra monetary compensation when I take interns	65.1	28.3	4.6	1.6	0.3
Interns cause an increase in my workload	2.3	6.8	13.4	59.9	17.6
Being a preceptor improves my chances of promotion and advancement	18.0	43.5	28.4	9.2	1.0
I do not have adequate time to perform my job responsibilities while I function as a preceptor	7.5	37.6	31.4	20.3	3.3
I receive insufficient compensation for taking interns	11.5	21.7	42.4	15.5	8.9

Table 8. (continued)					
Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	%	%	%	%	%
My responsibilities as a preceptor are clearly defined	2.0	17.6	23.9	46.7	9.8
I feel I had adequate preparation for my role as preceptor	2.0	15.8	24.0	50.0	8.2
There are adequate opportunities for me to share information with other preceptors	6.2	23.6	31.8	32.1	6.2
There are guidelines that clearly outline the responsibilities of the DI director/clinical coordinator in relation to my preceptor role	3.0	19.3	29.2	40.7	7.9

Table 8. (continued)					
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Question	%	%	%	%	%
The DI director/clinical coordinator is unavailable to help me develop in my role as preceptor	18.8	35.2	36.5	7.6	2.0
I feel pressured to take interns by my supervisor(s)	30.7	35.6	20.1	11.2	2.3

Chapter 5

DISCUSSION

Results of the study reveal several perceived motivators and barriers to becoming a DI preceptor in Arizona. Significant differences in perceptions about the preceptor role between preceptors and non-preceptors were observed. Although most of the advantages, needs, and obstacles identified by survey participants to serving as a preceptor and remain satisfied in the role are shared, non-preceptors perceived fewer benefits and greater hindrances associated with the position.

The intangible benefits and personal satisfaction gained from precepting dietetic interns appear to be strong motivators for practitioners to become preceptors and continue in the role. Preceptors indicated that working with interns gave them a sense of achievement, kept them current and stimulated in the profession, improved their teaching skills, and contributed to the profession. These findings parallel those reported in similar studies with DI preceptors and nurse preceptors (Conklin & Simko, 1995; Dibert & Goldenberg, 1995; Gilbride & Conklin, 1996; Hyrkäs & Shoemaker, 2007; Jay & Hoffman, 2000; Marincic & Francfort, 2002; Usher et al., 1999). Additionally, current preceptors agreed more strongly with gaining a sense of achievement from precepting than former preceptors suggesting that personal fulfillment encourages mentors to remain in the role. The participants who had never precepted dietetic interns responded significantly less favorably to personal satisfaction items than preceptors

indicating that non-preceptors perceived there to be less individual rewards for mentoring interns than preceptors. Perceiving fewer benefits may lessen the incentive for practitioners to take on the role of preceptor.

Survey items regarding commitment to the preceptor role received the highest ratings by preceptors suggesting that dedication to the profession plays a persuasive role in the decision to mentor interns. Non-preceptors agreed with the statements significantly less than preceptors indicating a lower level of commitment. Participants responded that they cared about the fate of the DI program. DI preceptors and nurse preceptors participating in comparable studies rated this item similarly (Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002). The most positively scored statement of the survey by preceptors was that they believed becoming a mentor was definitely not a mistake on their part. DI preceptors in a survey performed by Marincic and Francfort (2002) also agreed the most strongly with this statement. Conversely, nurse preceptors involved in a Canadian study agreed with the statement less (Hyrkäs & Shoemaker, 2007). Preceptors' commitment to the role was demonstrated when 83% of preceptors in the survey reported they would continue to take interns if it was completely up to them. Additionally, preceptors indicated that they believed it was a professional duty to precept. While the Academy encourages dietitians to give back to the profession by precepting interns (Taylor et al., 2010), only 31% of RDs in the survey reported there was an emphasis in their classes or internship on giving back to the profession through mentoring. Some

participants in a focus group discussion with DI preceptors agreed that precepting was a duty, but others thought they should be compensated for the job (Taylor et al., 2010).

The lack of compensation associated with the preceptor role may hinder some practitioners from becoming mentors. Most preceptors (93%) indicated they did not receive extra monetary compensation for training interns. These results are similar to those of another survey in which 8% of DI preceptors reported receiving any tangible benefits for the position (Marincic & Francfort, 2000). Additionally, only 33% of preceptors reported receiving sufficient compensation for taking interns.

Although several participants indicated they would precept interns without any incentives, most indicated that certain rewards such as CEUs, expenses paid to attend a national conference, and pay for their time would encourage them to take an intern. Support for the role, however, may be more influential than monetary benefits in motivating practitioners to become mentors. Significantly more non-preceptors than preceptors reported that training on teaching and internship expectations, access to assistance when needed, and the ability to choose when to take an intern were incentives to precept. Support is also desired for preceptors to remain in the role as more past preceptors reported these items as incentives than current preceptors. Participants also indicated that support from their facility's administration, supervisors, and the internship director would make them more likely to take an intern.

Survey participants did not rate the items relating to support for the preceptor as favorably as the statements concerning personal benefits and commitment. Most of the support items, however, were perceived slightly more positively by preceptors in this study than by DI preceptors in a prior survey performed by Marincic and Francfort (2002). Preceptors typically agreed that their immediate supervisors were supportive and understood their role as preceptor and the facility administration was supportive of the internship. Non-preceptors viewed these items significantly less positively than preceptors. Low scores were given for statements involving guidelines, scheduling rotation times, and availability of the DI director or clinical coordinator to assist with preceptor development. Likewise, DI preceptors in a similar study gave low ratings in these areas (Marincic & Francfort, 2002). The one support item that preceptors in the current study rated less favorably than the preceptors in the Marincic and Francfort (2002) survey, which may be a particular target to improve preceptor participation, was adequate opportunities to share information with other preceptors. Nurse preceptors viewed sharing opportunities negatively and rated the item lower than DI preceptors (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Usher et al., 1999). Low ratings in the area of support indicate that preceptors perceive limited support systems within the DI program. Even lower ratings by non-preceptors suggest that a perceived lack of support for preceptors is a key barrier to mentoring dietetic interns. Former preceptors viewed the support issues less positively than current

preceptors indicating a need for improved support systems to retain preceptors.

Current and former preceptors typically believed they could be effective preceptors. Non-preceptors, however, did not share this same level of confidence and rated their ability to precept effectively significantly less favorably. These responses suggest that insecurity about precepting may deter professionals from becoming mentors. Although preceptors were confident in their abilities to precept, they were much less positive about having clearly defined responsibilities and adequate preparation for the role. Similar opinions were observed in previous studies of DI preceptors and nurse preceptors (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Marincic & Francfort, 2002; Usher et al., 1999). Equally low ratings were given by preceptors for adequate resources being available to assist with intern training. Responses to this item by non-preceptors were significantly less favorable than preceptors, resulting in an overall neutral score. Former preceptors viewed having well-defined responsibilities, accessible training resources, and adequate preparation for the role less positively than current preceptors. Low scores by participants across these categories suggest a need for enhanced training and guidelines for preceptors. Correspondingly, DI preceptors and nurse preceptors from earlier studies expressed a desire for additional training and materials to assist them in their role (Ortman & Arsenault, 2010; Taylor et al., 2010; Stevenson et al., 1995; Wilson, 2002).

The lower ratings given by former preceptors and non-preceptors reveal a need for enhanced training and resources to recruit and retain preceptors.

A majority of preceptors (78%) indicated that training interns increased their workload. Of the preceptors surveyed, only 45% felt they had adequate time to perform their job responsibilities while functioning as a preceptor. DI preceptors in a prior study rated this item less favorably and did not feel there was sufficient time to perform job duties while mentoring (Marincic & Francfort, 2002). Both preceptors and non-preceptors did not believe that intern projects decreased their workload. However, preceptors disagreed with this statement significantly more than non-preceptors.

Preceptors gave low ratings to having an appropriate workload while precepting. DI preceptors in the survey performed by Marincic and Francfort (2002) responded more positively to this question, but nurse preceptors in similar studies as a whole rated a having a suitable workload less favorably (Dibert & Goldenberg, 1995; Hyrkäs & Shoemaker, 2007; Usher et al., 1999). Non-preceptors responded significantly less positively to this item and did not feel that the workload was appropriate while functioning as a preceptor than preceptors. The additional workload associated with mentoring interns likely discourages some practitioners from becoming preceptors, particularly when there is little or no compensation for taking on the role.

Workplaces or situations that do not allow interns and workplaces that do not have enough for the interns to do may prevent practitioners who are willing to mentor from becoming preceptors. Non-preceptors gave

significantly lower scores than preceptors indicating that these items are barriers to mentoring interns. Benefits to the department or facility by the presence of interns may provide incentives for practitioners to precept. Participants believed that interns brought new ideas and intern projects were useful to the department. DI preceptors in prior studies reported similar views (Conklin & Simko, 1995; Gilbride & Conklin, 1996; Jay & Hoffman, 2000). Additionally, participants thought precepting students increased awareness in their practice area or specialty and provided an opportunity to screen potential employees and job recruit. DI preceptors participating in a focus group study similarly viewed interns as appealing job candidates (Kruzich et al., 2003). Non-preceptors rated most of these items significantly less positively than preceptors suggesting that practitioners who have never precepted may not be aware or realize the contributions and potential benefits that interns can bring to the workplace.

With respect to interns, 38% of participants believed that some interns lack the necessary technical skills and knowledge. Most participants, however, did not agree with the statement that interns might make serious mistakes and cause patient or client harm. Non-preceptors rated this item significantly less favorably than preceptors, suggesting that liability regarding interns may be an obstacle to some professionals taking on the role of preceptor. Indeed, 29% of participants indicated they were concerned about the liability of dietetic interns under their supervision.

Participants typically were not worried interns would contradict them and

their teaching. However, a significantly less favorable view of this item by non-preceptors compared with preceptors suggests that concern about being challenged by interns may be a factor in the decision of some practitioners to assume the role of preceptor.

A significant barrier to mentoring dietetic interns identified by this study was a lack of awareness about the preceptor role. Nearly half of non-preceptors reported they had thought about becoming a mentor, but 82% of non-preceptors did not know how to become a preceptor. Additionally, 64% of non-RDs and non-DTRs were not aware they were eligible to precept dietetic interns. The lack of knowledge among dietetic and nutrition professionals regarding the preceptor position may exclude a pool of potential preceptors from becoming mentors.

The perceptions of preceptors regarding the preceptor role in this study are similar to those of DI preceptors reported in previous studies. This study adds to the body of knowledge by examining the perceptions of non-preceptors about mentoring dietetic interns, which was not done in previous studies. Non-preceptors typically view the role of preceptor less positively than preceptors. This may offer insight as to why these practitioners choose not to precept. These less favorable perceptions must be considered to encourage non-preceptors to become preceptors.

Chapter 6

CONCLUSIONS

Dietetic and nutrition professionals become preceptors and remain in the role because of intangible personal rewards, dedication to the role and profession, and contributions to the workplace by interns. Practitioners do not become preceptors or do not continue in the role because of lack of compensation, increased workload, lack of support, lack of training, lack of resources, intern liability, and lack of awareness of how to become a mentor. Results from this study can be used to target perceived barriers and emphasize benefits associated with the preceptor role to encourage participation in the preceptor process to make more internship positions available. Future studies could expand this survey nationally to identify common obstacles and incentives for which programs and campaigns can be developed and enhanced to improve awareness, resources, and support for the preceptor role.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD DOCUMENTATION



Office of Research Integrity and Assurance

To: Donna Winham
HSC 1401

fu **From:** Mark Roosa, Chair *SM*
Soc Beh IRB

Date: 07/21/2011

Committee Action: Exemption Granted

IRB Action Date: 07/21/2011

IRB Protocol #: 1106006560

Study Title: Dietetic Internship Preceptor Survey

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(2).

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.

APPENDIX B

DIETETIC INTERNSHIP MENTOR SURVEY

First, please tell us a bit about you:

1. Please select your gender.

Female.....

Male.....

2. In which year were you born? _____

3. From the American Dietetic Association (ADA) website, the following definition of dietetics is provided:

“Dietetics is defined as the integration and application of principles derived from the sciences of nutrition, biochemistry, physiology, food management and behavioral and social sciences to achieve and maintain people’s health”

Are you currently employed in the nutrition and dietetics field?

Yes.....

Yes, self-employed.....

No.....

Maybe, not sure.....

4. If applicable, how many total years have you worked in the nutrition and dietetics field? _____

5. Dietetic intern mentors or preceptors serve as role models for students during their dietetic internship experience. They provide information, facilitate learning, and assess learning, among other responsibilities.

Dietetic internship preceptors/mentors do not have to be RDs, DTRs, or other certified nutrition or dietetics professionals. Other qualified personnel with one year or more of professional experience may be eligible to precept/mentor interns.

In fact, many nutrition professionals provide intern education opportunities in non-traditional dietetic settings such as product development, pharmaceutical or supplement sales, culinary settings, spas, gyms, corporate wellness, and research.

Did you know that DI preceptors/mentors could be other professionals besides RDs and DTRs?

Yes.....

No.....

These next questions ask about your current preceptor/mentor opportunities.

6. Does your current place of employment train dietetic interns?

- Yes.....
- No
- Do not know
- I am currently unemployed

7. Do you personally serve as a dietetic internship preceptor/mentor now?

- Yes (Go to question 10)
- No (Go to question 8)
- Not at this time, but I have in the past (Go to 10) ...

8. Have you ever thought about becoming a dietetic internship preceptor?

- Yes.....
- No.....

9. Are you aware of how to become a dietetic internship preceptor/mentor?

- Yes.....
- No.....

PERCEPTIONS OF BEING A DIETETIC INTERNSHIP PRECEPTOR

The following sections ask about the positive and negative perceptions of being a dietetic internship preceptor/mentor. Based on previous published research, qualitative interviews, and pilot testing, several themes emerged as important barriers and/or motivators for successful precepting/mentoring.

These included: personal satisfaction, knowledge exchange, facility support, and interactions with the interns. Please tell us your opinions on these statements.

Personal Satisfaction, Self-Efficacy, and Knowledge

10. Please check ONE selection for each statement that comes closest to reflecting your opinion about it.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
If I worked with interns, I would get a real sense of achievement.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being involved in an internship program would add prestige to my job.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I believe it is a professional duty to precept.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being a preceptor would improve my teaching skills.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being a preceptor would allow me to keep current and stimulated in my profession.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being a preceptor would contribute to my profession.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I believe I could be an effective preceptor.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agreeing to be a preceptor would be a definite mistake on my part.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I care about the fate of the dietetic internship program.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Facility Support for Dietetic Internship Preceptors

11. Please check ONE selection for each statement.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My immediate supervisors would be supportive of my role as preceptor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The facility administration would NOT be supportive of the internship program.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My immediate supervisors would understand my role as preceptor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My workload would be appropriate if I functioned as a preceptor.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adequate resources would be available to assist with intern training.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The internship director would schedule rotations at convenient times.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intern activities would highlight the functions of this department to administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Precepting students would increase awareness of my practice area or specialty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being a preceptor would provide an opportunity to screen potential employees and job recruit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Dietetic Interns Themselves

12. Please check ONE selection for each statement.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My workplace or situation would not allow interns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There would not be enough for interns to do at my workplace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intern projects conducted in this facility would be useful to the department.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interns would bring new ideas to our department.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interns would conduct themselves in a professional manner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intern projects would decrease my workload	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interns would not dress properly for the workplace..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Some interns lack the necessary technical skills and knowledge.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interns would be difficult to relate to because of the generation gap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry interns would contradict me and my teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Some interns are 'know-it-alls'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interns may make serious mistakes and cause patient/client harm.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. What types of incentives or changes would encourage you to mentor interns, or to mentor more interns?

I would be more likely to take an intern if I received...

- Continuing education units (CEUs) for my field
- Pay for my time
- Expenses paid to attend a national conference, e.g. FNCE, SNA
- Official reduction in my regular workload while intern there
- The ability to provide input on the intern selection process
- The ability to choose when to take an intern(s)
- Training on the internship expectations.....
- Training on how to teach and communicate with the interns
- Access to an "on-call" specialist for help or assistance with issues when they arise.....

14. What is the highest level of education that you have completed?

- 11th grade or less
- Completed GED
- High school diploma
- Some college credit, but less than 1 year
- 1 or more years of college, no degree.....
- Associate degree (ex: AA or AS).....
- Bachelor's degree (BA, BS, AB).....
- Master's degree (MS, MA, Med, MBA)
- Doctorate degree (PhD, DrPH, ScD)

15. Are you a member of the American Dietetic Association (ADA)?

- Yes.....
- No
- Former ADA member, not currently.....

16. Do you have any of the following credentials? You may select all that apply.

- Registered Dietitian (RD) (Go to question 17)
- Dietetic Technician Registered (DTR) (Go to question 20)
- Certified Dietary Manager (CDM) (Go to question 20)
- None of these (Go to question 20)

17. How did you complete the necessary training to become a Registered Dietitian?

- Regular internship
 - Combined Masters/internship program.....
 - Masters plus 6-months work experience
 - Coordinated DPD/internship program
 - 'Grandfathered' RD when requirements changed ...
 - Other (Please explain below).....
-

18. How many years have you been an RD? _____

19. Think back to your training in dietetics. Was there emphasis in your classes or internship on giving back to the profession through mentoring?

- Yes.....
- No
- Don't know/don't remember.....

20. What is your primary employment setting? Please select the one that best fits.

- | | |
|---|---|
| Hospital (in-patient/acute care)..... <input type="checkbox"/> | Private practice <input type="checkbox"/> |
| Clinic or Ambulatory care center... <input type="checkbox"/> | Supermarket..... <input type="checkbox"/> |
| Extended care facility <input type="checkbox"/> | Consultant–consumer <input type="checkbox"/> |
| Healthcare provider..... <input type="checkbox"/> | Consultant–health care <input type="checkbox"/> |
| Community/Public Health <input type="checkbox"/> | Consultant–corporate..... <input type="checkbox"/> |
| Government agency <input type="checkbox"/> | Student/Intern <input type="checkbox"/> |
| School food service..... <input type="checkbox"/> | Research <input type="checkbox"/> |
| Faculty member at college or university..... <input type="checkbox"/> | Food manufacturer/distributor/retailer <input type="checkbox"/> |

21. What is your main job title? (Select one only)

- | | |
|--|--|
| Clinical Dietitian..... <input type="checkbox"/> | Food Service Director..... <input type="checkbox"/> |
| Clinical Nutrition Manager..... <input type="checkbox"/> | Faculty <input type="checkbox"/> |
| Registered Dietitian <input type="checkbox"/> | Nutrition Consultant <input type="checkbox"/> |
| Dietetic Technician <input type="checkbox"/> | Vendor Representative <input type="checkbox"/> |
| Dietary Coordinator <input type="checkbox"/> | Other (Please specify)..... <input type="checkbox"/> |
-

22. Dietetic interns are required to carry personal liability insurance while they are in supervised practice settings.

Are you (or would you) be concerned about liability of dietetic interns under your supervision?

- Yes.....
- No
- Not sure

23. Which one or more of the following is your race? Check all that apply.

- | | |
|--|--|
| African American, Black, | Japanese..... <input type="checkbox"/> |
| Afro-Caribbean..... <input type="checkbox"/> | Chinese <input type="checkbox"/> |
| Asian Indian <input type="checkbox"/> | Korean <input type="checkbox"/> |
| American Indian/Alaskan Native... <input type="checkbox"/> | White <input type="checkbox"/> |
| Native Hawaiian or other Pacific | Other race(s) <input type="checkbox"/> |
| Islander..... <input type="checkbox"/> | Please specify _____ |

24. Are you of Hispanic, Latino, or Spanish origin?

- No, not of Hispanic, Latino, or Spanish origin
- Yes, Mexican, Mexican American, Chicano.....
- Yes, Puerto Rican.....
- Yes, Cuban
- Yes, another Hispanic, Latino, or Spanish origin

25. Part of mentoring involves training students of different backgrounds as well as providing culturally competent care.

Cultural competency involves listening to clients and determining what is best for their circumstances rather than relying on a standardized list of food behaviors and practices. However, general knowledge of different cultural and religious beliefs can facilitate communication with clients as well as students.

How knowledgeable are you of the dietary and food related behaviors for the following general groups?

- | | Know very little | Know some | Know a lot |
|----------------------|--------------------------|--------------------------|--------------------------|
| Hindu..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mexican | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Jewish..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Muslim..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Somali..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Korean..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Native American..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |