

JOB AND CAREER SATISFACTION OF MANAGEMENT DIETITIANS

by

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B.S., Kansas State University, 1993

M.S., Kansas State University, 1998

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Hospitality Management and Dietetics
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

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Abstract

Despite the enormous amount of research about job satisfaction and intent to leave, few studies have focused on Registered Dietitians (RDs) with management responsibilities. Even less is known about the level of career satisfaction or intent to leave the dietetics profession.

This study examined job and career satisfaction among members of four dietetic practice groups (DPGs). An online questionnaire included 36 items of the Job Satisfaction Survey (JSS), career satisfaction and intent to leave measures. Data were analyzed from 966 dietitians in management and clinical practice using traditional statistical procedures.

Management dietitians had significantly higher composite scores for six out of nine facets of job satisfaction than dietitians in non-managerial positions. Overall satisfaction scores for management dietitians ($M = 153.75 \pm 26.68$) were also significantly higher compared to non-management dietitians ($M = 140.79 \pm 30.26$, $t = 4.368$, $p < 0.001$). Overall satisfaction scores also differed significantly across seven groups of management dietitians, $F(6, 844) = 4.41$, $p < 0.001$. The majority of dietitians in this study did not intend to seek other jobs or leave their current jobs.

Overall, management dietitians were satisfied with their careers (19.82 ± 3.73). In contrast, non-management dietitians were closer to neutral and significantly less satisfied with their careers (16.44 ± 5.06 , $t = 6.907$, $p < 0.001$). Career satisfaction scores also differed significantly across seven job titles of managers, $F(6, 839) = 5.69$, $p < 0.001$. Intent to leave the profession was not observed for the majority of dietitians in this study. Additional results, implications for the dietetics profession and recommendations for future research are discussed.

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Approved by:

Major Professor
Deborah Canter, PhD

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CHAPTER 1 - INTRODUCTION

Registered dietitians (RDs) are experts trained at providing food and nutrition services. Although fewer in numbers, dietitians who are managers of food and nutrition services confront challenges like those in any line of work, perhaps to the point that management jobs for dietitians are not desirable. It is hard to imagine that performing the essential management functions can be accomplished successfully if management RDs are dissatisfied with their jobs. However, it is not known if management dietitians currently enjoy their jobs.

Knowing the status of job satisfaction is important, but not sufficient. Dietitians invest significantly in their academic preparation and maintenance of multiple professional credentials. In recent years there have been recurring informal discussions, particularly among management dietitians, that could be interpreted as isolation from the American Dietetic Association (ADA). This is a critical situation because the field of dietetics, today typically known for the provision of medical nutrition care, was partly founded on management expertise (Cluskey, Gerald, & Gregoire, 2007). Therefore, it is important to find out if dietitians in management roles feel satisfied with their careers or if they can identify with the profession of dietetics. Lack of this knowledge challenges the foundation of dietetics and could potentially impact the future of the profession in a negative way.

Overview of Job and Career Satisfaction

Job satisfaction research is abundant, but does not always generate exact findings. For example, many researchers have tried to link job satisfaction and productivity with varied results (Iaffaldano & Muchinsky, 1985; Judge, Thoresen, Bono, & Patton, 2001; Spector, 1997).

Researchers have correlated job satisfaction with all types of demographic factors such as age (Herzberg, Mausner, & Synderman, 1959; Birdi, Warr, & Oswald, 1995; Spector, 1997), gender (Brush, Moch, & Pooyan, 1987; Gruneberg, 1979; Spector, 1997), pay (Rice, Philips, & McFarlin, 1990; Seybolt, 1976; Spector, 1985, 2000), and level of education (Gordon & Avery, 1975; Florit & Lladosa, 2007; Klein & Maher, 1966; Sinha & Sarma, 1962) also with mixed results.

A promising correlate of work dissatisfaction is leaving the job (Griffeth, Hom, & Gaertner, 2000; Hellman, 1997; Lambert, Hogan, & Burton, 2001). Voluntary turnover among highly-specialized professionals, such as dietitians, due to dissatisfaction is costly in many ways. Equally important to know is if someone is dissatisfied and remains in the organization or on the job. It is unclear if these relationships between satisfaction and intending to stay or leave exist among dietitians.

Parallel to the study of job satisfaction is the assessment of how professionals like or dislike their careers. Career satisfaction has been examined both independently and concurrently with job satisfaction (Brady, 1980; Collins et al., 2000; Judge, Cable, Boudreau, & Bretz, 1995; Lounsbury et al., 2003), but overall, lacks the historical foundation of job satisfaction research. Career satisfaction of dietitians is also limited (Sauer, Shanklin, Canter, & Angel, 2007; Stone, Vaden, & Vaden, 1981a, Stone, Vaden, & Vaden, 1981b). Similar to job dissatisfaction and intent to leave correlations, research has focused on career dissatisfaction and intent to leave certain professions (Krausz, Koslowsky, Shalom & Elyakim, 1995; Rittenhouse, Mertz, Keane, & Grumbach, 2004). There is limited research about dietitians staying or leaving the dietetics profession.

The Profession of Dietetics

The ADA defines a registered dietitian as the most specialized expert of food and nutrition (ADA, 2008a). However, the scope of dietetics practice is broad and often categorized by specific job titles such as clinical dietitians, community nutrition dietitians, foodservice directors and managers, or consultants (U.S. Department of Labor, 2008). Clinical dietitians typically assess nutritional status, develop intervention strategies, and provide other nutritional expertise in hospitals, nursing care facilities, and other institutions. Community dietitians often work in public health agencies and also facilitate nutritional care for at-risk populations. Management dietitians are usually responsible for large-scale meal planning, human resources, training, purchasing, regulatory compliance and financial management in institutional settings (U.S. DOL, 2008).

A majority (55%) of registered dietitians work as clinicians (Rogers, 2008). Twelve percent manage a variety of foodservice operations and 11% work in community nutrition, while the remaining 12% are employed as educators, consultants, or entrepreneurs in business and industry. Overall, 39% of dietitians work in hospitals. The majority (97%) of dietetics practitioners are female with an average age of 46 years and 16 years of experience. Rogers (2008) also reported that 41% and 14% of all practitioners have 20 or more years or less than 5 years of work experience, respectively. Approximately 75% of ADA's nearly 70,000 members are also RDs (see <http://www.eatright.org>).

In reviewing the literature, many of the traditional variables associated with job or career satisfaction among other occupations remain pertinent to dietetics professionals. For example, pay as it relates to job satisfaction is a dissatisfying element among dietitians (Dalton, Gilbride,

Russo, & Vergis, 1993; Rehn, Stallings, Wolman, & Cullen, 1989). Table 1.1 illustrates the average pay among selected health-related professionals and dietitians.

Table 1.1: Average Yearly Wage of Health-Related Professionals

| Position | Average Salary |
|-----------------------------|-----------------------|
| Pharmacist | \$98,960 |
| Physical Therapist | \$71,520 |
| Occupational Therapist | \$65,540 |
| Dental Hygienist | \$64,910 |
| Speech-Language Pathologist | \$63,740 |
| Audiologist | \$63,660 |
| Registered Nurse | \$62,480 |
| Respiratory Therapist | \$50,930 |
| Registered Dietitian | \$50,030 |
| Social Worker | \$47,170 |

Note: Compiled from "Wages by area and occupation," U. S. Department of Labor, Bureau of Labor Statistics, 2008, [Online]. Available at: <http://www.bls.gov/bls/blswage.htm>.

When comparing pay and gender among healthcare foodservice directors, Barrett and Shanklin (1996) found salary differences among males and females within the same age categories. Accordingly, male foodservice directors indicated more experience in terms of total years in managerial positions as compared to females. Principle factor analysis also revealed career importance factors were similar for both men and women as well as for RD directors and non-credentialed directors. The factors included ability, working conditions, and rewards. Barrett and Shanklin suggested that future research assess the effects of career delay or interruption due to family or late career entry and their related impact on career progress, salary and overall satisfaction.

Another factor often included in the assessment of job and career satisfaction is level of education. Early research by Klein and Maher (1966) suggested that managers with a college education were less satisfied than those without a degree. Others have reported no relationship between level of education and job satisfaction (Gordon & Avery, 1975; Sinha & Sarma, 1962). More recent research suggests an indirect effect of education on job satisfaction through various moderators such as health, pay, or other specific job characteristics (Florit & Lladosa, 2007). Ganzach (2003) indicated that negative effects with regards to job satisfaction may be related to heightened expectations about job rewards which tend to increase with level of education.

Registered dietitians attain their training through formal accredited programs and are expected to practice life-long learning throughout their careers to maintain their RD credential. The minimum requirements for an entry-level dietitian include at least a bachelor's degree from a regionally-accredited institution offering an accredited dietetics education program. Dietetics majors complete a wide array of courses involving food and food preparation, nutrition, economics, management, chemistry, biochemistry, biology, microbiology, and physiology (ADA, 2008b). The Commission on Dietetic Registration (CDR) confers the RD credential to those who successfully complete a baccalaureate degree, 1200 hours of RD-supervised practice and finally, successful completion of a national registration examination (CDR, 2008). To maintain the RD status, dietitians must complete a minimum of 75 hours of job-related continuing education every five years. Some states also require licensure in addition to the RD credential, with additional continuing education expectations (CDR, 2008).

The theoretical relationship between pay, gender, and education level as these factors relate to job and career satisfaction raises particular interest for the dietetics profession. ADA's compensation review indicates that 45% of dietitians hold master's degrees and 3% hold

doctorates (Rogers, 2008). Interestingly, the difference between the median wage of RDs with a bachelor's degree and that of RDs with a master's degree in 2007 was only \$2.88 per hour (Rogers, 2008).

Management in Dietetics Practice

This study seeks a closer examination of both job and career satisfaction for dietitians in management roles. Some dietitians assume management responsibilities for the financial rewards or the opportunity for promotion and new challenges. Others may enter the management ranks as a consequence of organizational change or restructuring (Hudson, 2006). Traditional views would suggest that most management dietitians are “foodservice dietitians”. Management dietitians have performed as directors, managers, and supervisors of foodservices for decades, but the term “management dietitian” increasingly encompasses other areas of dietetics practice (Cluskey, Gerald, & Gregoire, 2007). For example, clinical nutrition managers, chief clinical dietitians, or patient service managers are responsible for the nutritional care of patients (Hudson, 2006). However, they are also responsible for the leadership and management of clinical teams or other staff, while adhering to regulatory standards, meeting financial demands, and delivering customer satisfaction. Other dietitians provide management expertise while serving the public as community dietitians or public health nutritionists who provide management to feeding sites, special nutrition programs such as Women, Infants and Children (WIC) clinics or other support agencies (Hudson, 2006).

The attainment of increasing supervisory responsibility is strongly associated with wage gains among dietitians. Specifically, those who supervise 100 or more employees have a median salary nearly 50% greater than other RDs (Rogers, 2008). Management of financial resources also correlates with higher salaries for dietitians. Those responsible for budgets of \$1 million or

more earn a median wage approximately 50 times greater than those with no budget responsibility. However, only 24% of dietitians with management responsibilities reported budget authority within their organization (Rogers).

Like other professionals, management dietitians must adapt to significant change. Silverman, Gregoire, Lafferty, and Dowling (2000) suggested that management dietitians should be prepared to provide appropriate and appealing nutrition services while reducing expenses, reducing staffing, and generating greater revenue. These changes in roles and responsibilities illustrate the trend from the traditional cost center business approach in dietetics towards a profit center model.

Canter and Nettles (2003) discussed the trend and prevalence of multi-department responsibilities assigned to directors of food and nutrition services in healthcare environments, typically enacted through organizational restructuring and subsequent cost controls in the healthcare environment. Providing departmental leadership beyond food and nutrition services often includes management of linen services, patient transportation, housekeeping, and/or maintenance/engineering. Of 568 management dietitians surveyed, 92% managed multiple departments; however, few of the directors received a pay increase when taking on the additional responsibilities. Mean importance ratings of 21 various skills related to multi-department leadership revealed that essentially all skills were deemed “very important”. Canter and Nettles suggested that the trend towards multi-department management responsibilities will continue to increase for dietitians, requiring them to be proactive, ambitious, and prepared for the challenge. An assessment of job and career satisfaction is in order given the trend to assign management dietitians more large-scale responsibilities, with little opportunity for formal education related to these functions and little to no increase in pay accompanying the additional responsibilities.

Clinical nutrition management should not be neglected in this the discussion of management in dietetics and satisfaction with work or career. Witte and Messersmith (1995) investigated the various duties of clinical managers and factors associated with the performance and skill development among this unique group (n = 472). Again, management dietitians in clinical settings were highly educated with 46% having master's degrees while 17% had plans to complete one. Only 25% of the hospitals that employed management dietitians in this study required a master's degree. In addition, no differences in self-reported competence levels were found between those with and without a graduate degree. Other than earning an advanced degree, clinical nutrition managers cited no other strategies to enhance their management skills or knowledge.

Witte and Messersmith (1995) found that a majority (64%) of clinical nutrition managers had previous experience in both foodservice and clinical nutrition management. However, about half (51%) of clinical nutrition managers had less than 3 years of experience in their current role. Some duties one might expect to find with any management role, such as determining and managing budgets and developing sources of revenue, were not represented among this sample. The researchers concluded that skills and knowledge required for these duties were either lacking or financial resources pertaining to clinical management were not seen as important within the organizations they worked in.

The roles and responsibilities exhibited by managers in dietetics are quite diverse, as illustrated by those managing foodservices versus those with clinical oversight. Another group of dietitians with management responsibilities are those who manage both the foodservice and clinical sections of one organization. These individuals may also manage multiple departments. The circumstances that may have lead these dietitians towards careers with management

responsibilities may be as diverse as their responsibilities, resulting in varying wants and needs in job and career satisfaction.

Statement of the Problem

The dietetics profession is unique for several reasons including the demographic composition, variety of occupational roles and work settings, and pay discrepancies as compared to similar health-related professions. These same variables exhibit interesting relationships when included in job and career satisfaction research among other professionals.

The empirical research clearly shows a thorough examination of job satisfaction among other professions related to typical factors such as pay, gender, age, and education level. Thus, some researchers have since begun to examine satisfaction using more advanced and complex research models. However, an extensive review of literature did not reveal substantial research conducted in the last 20 years of dietitians with management responsibilities. This lack of this research makes it difficult to generalize findings of outdated research given the different needs of today's dietitians. Therefore, assessment of job satisfaction with this important category of dietitians is needed. Finally, the intent of management dietitians to leave their jobs and how this relates to their level of job satisfaction and career satisfaction is unknown.

Career satisfaction research has gained popularity and shares similarities to job satisfaction. However, some researchers measure the two constructs parallel to one another yielding differing perspectives. Measurement of both job and career satisfaction of management dietitians is needed. In addition, evaluation of whether management dietitians are satisfied with their careers and if this has anything to do with job satisfaction or other variables is equally important.

There is little to no evidence to suggest whether dietitians in general feel positively or negatively about their careers. Even less is known specifically about management dietitians. If career satisfaction or dissatisfaction is prevalent, it is important to understand the factors that may contribute to the phenomena and investigate if there are any relationships with job satisfaction factors. If dissatisfaction with dietitians' careers is evident, it is critical to understand if these highly specialized and skilled professionals intend to leave the profession all together.

Practical Implications

The potential findings of this study are beneficial and practical in several ways. Current insight about job and career satisfaction aligns the ADA and other organizations in a position to better support job and career development of dietitians. More specifically, if dietitians are satisfied with certain aspects of their jobs or careers, then those facets should be further examined and encouraged. If dietitians are dissatisfied and intend to stay or leave, the specific sources of job or career dissatisfaction should be addressed.

Dissatisfaction with work can impact productivity, causing concern for employers, organizations and customers. When professionals no longer bring value through efficiency and effectiveness, there is little need to continue the employment relationship. Negative perceptions about the services and expertise provided by credentialed dietitians are threatening to the dietetics profession. Moreover, without observable value in hiring and promoting registered dietitians, the possibility exists for others without the appropriate qualifications or training to provide nutritional care and service. Current insight about dietitians' level of satisfaction and intentions also allows researchers to examine whether a relationship exists with the actual work performed and related outcomes.

The profession of dietetics is broad and varied. Similarly, the process of educating future dietitians requires that academic programs and faculty stay current regarding the trends, challenges and needs within the diverse work environments. The career selection process for dietitians often begins within the academic setting and, therefore, is further enhanced by current knowledge about dietitians' level of satisfaction. Educators, advisors and mentors of dietitians gain from understanding the satisfying and dissatisfying elements that surround the jobs and careers of dietitians. Accordingly, educators can better guide and prepare students for the realities and challenges that lie ahead for graduates when factors about jobs and careers are understood.

Justification

Data about both job satisfaction and career satisfaction among dietitians are limited. To better establish a framework from which to study satisfaction across all areas of dietetics practice, examination of the relationships between job and career satisfaction along with intent to leave is necessary. The limited data about dietitians as compared to the larger set of empirical research on related professions justifies further assessment of job and career satisfaction. As an important and distinctive subset of dietetics practice, dietitians in management roles present a unique set of characteristics which may be related to both job and career satisfaction.

Dietitians already embark upon an intense path of academic preparation, eventually culminating in professional credentials and, for some, advanced certification and licensure. Research involving professionals in other fields shows that advanced education brings with it consequences related to job and career satisfaction.

Important Changes in Dietetics Practice

Important and sensitive changes related to dietetics education are currently underway or being proposed such as required advanced education and increased supervised practice hours. More specifically, the Commission on Accreditation on Dietetics Education (CADE) recently changed education program standards. The new standards require programs to provide 1200 hours of supervised practice experience, up from the previous 900 hours (CADE, 2008). The new standards also eliminate a longstanding “generalist” approach to dietetics education and instead require the designation of practice concentration area for each program.

In 2004, the ADA House of Delegates (HOD) appointed an education task force, charged with the mission to use a “clean-slate approach” in creating a new plan for educating and credentialing dietetics professionals. On February 21, 2005, the task force included in their report the following recommendations for dietetics education and credentialing: 1) to require a graduate degree for eligibility to sit for the registration examination and for entry into dietetics practice and 2) to require accredited programs preparing students for RD credentialing to have a seamless educational system, including both the necessary academic preparation and supervised practice experience in one graduate-degree-granting program (ADA, 2005). Following this announcement, scores of dietitians denounced the proposal for a required graduate degree. Meanwhile, other dietitians promoted the need for a practice-doctorate (Christi & Kight, 1993; Skipper & Lewis, 2006; Touge-Decker, 2004).

Today, there remain significant differences of opinion about advanced education among educators and practitioners. Given the intense unrest between the Task Force’s initial recommendations and practicing dietitians, a second task force was appointed with the mission of continuing the discussion of advanced education and practice (ADA, 2006). The issues

surrounding this discussion strongly resonate with the theoretical and practical nature of this study. Considerable alterations to education and preparation, such as requiring a graduate degree for dietitians, could impact the level of job or career satisfaction of dietitians and further cause negative consequences such as continued tenure or motivation within profession. Related, practitioners with advanced education but less pay as compared to their peers may increase existing dissatisfaction and/or departure. The mission of ADA's Education Task Force would be enhanced with current data about dietitians' satisfaction and justifies the need for the information gathered from this study.

These are important topics to address now since the level of education and pay may or may not affect level of satisfaction among professionals. Gaining an advanced degree requires a significant investment including both time and money from both students and academic programs. Requiring an advanced degree in order to practice entry-level dietetics could deter some from selecting the profession all together. Related, a significant investment in terms of money, time, and emotion in one's education with less than desirable pay, working conditions, or promotions during later career stages could impact the satisfaction dietitians have about their jobs and careers. It is important to have current information about how satisfied dietitians are with specific elements of their jobs and careers concurrent to discussions and decisions about dietetics preparation and education.

Whether satisfied or dissatisfied, management dietitians may or may not want to leave their jobs or the profession. Employee turnover is costly and unproductive, especially among professionals. Also, observed dissatisfaction without the intent to leave brings forth opportunities to make work or career conditions better for some dietitians. But, intent to leave jobs or the profession has received little attention in dietetics practice.

Although the intent of professionals to leave their jobs or their profession are substantial variables of interest to this study, it should also be noted that dietetics is facing the reality of increasing numbers of retirements in the near future, specifically among dietitians with management responsibilities (Gregoire & Greathouse, 2008; U.S. Department of Labor, 2008). Retiring dietitians expressing dissatisfaction with their jobs or careers could generate a negative effect on other dietitians. Negativity could threaten the overall appeal of management practice in dietetics.

Finally, job and career-related research should also advance existing theoretical evidence, identify needs within the field, and support the greater population of professionals being examined. Leaders of the ADA have put forth important research needs through the document, “Priorities for Research: Agenda to Support the Future of Dietetics Practice” (ADA, 2007). The objective of this publication is to serve as a blueprint for needed research activities that in turn directly support ADA members and the services rendered to customers and organizations. Of the priorities identified, the statement “research examining the best methods for attracting, educating and retaining competent ADA members and credentialed registered dietitians will be critical to the future of the dietetics profession”, clearly defines the need to examine factors that affect the satisfaction of dietitians in regards to their work and careers. The sub-objectives listed for this research priority clearly compliment the need for assessing multiple aspects of job satisfaction, career satisfaction and turnover intent among dietitians:

- Identify the most effective educational methods/strategies and requirements to facilitate competent dietetics practice throughout the professionals’ career.
- Identify career paths that position ADA members and credentialed to be in leadership positions.

- Identify trends in employment of registered dietitians.
- Identify important factors and effectiveness of strategies to attract and retain credentialed registered dietitians.

Purpose

The purpose of this research is to gain insight into the level of job and career satisfaction while contributing to the body of literature and informing the dietetics profession.

Objectives

The specific objectives of this dissertation are:

1. to measure job satisfaction of registered dietitians in management roles.
2. to measure career satisfaction of registered dietitians in management roles.
3. to measure the likelihood of registered dietitians in management roles to leave their current jobs.
4. to measure the likelihood of registered dietitians in management roles to leave the dietetics profession.
5. to examine the relationship between job satisfaction and intention to leave current jobs among registered dietitians in management roles.
6. to examine the relationship between career satisfaction and intention to leave the dietetics profession among registered dietitians in management roles.
7. to examine the relationship between job and career satisfaction.
8. to examine the relationship between intention to leave current jobs and the profession among registered dietitians in management roles.

Research Questions and Hypotheses

The research questions guiding this dissertation are as follows:

1. What is the level of job satisfaction of registered dietitians in management roles?
2. What is the level of career satisfaction of registered dietitians in management roles?
3. What is the level of intention of management dietitians to leave their current jobs?
4. What is the level of intention of management dietitians to leave the dietetics profession?
5. What is the relationship between management dietitians' job and career satisfaction?
6. What is the relationship between management dietitians' intention to leave their jobs and intention to leave the dietetics profession?

Following are the research hypotheses guiding this research. The conceptual model is illustrated in Figure 1.1.

- Hypothesis 1: Job satisfaction among registered dietitians in management roles will be negatively associated with intent to leave their current jobs.
- Hypothesis 2: Career satisfaction among registered dietitians in management roles will be negatively associated with intent to leave the dietetics profession.
- Hypothesis 3: Job satisfaction among registered dietitians in management roles will be negatively associated with intent to leave the dietetics profession.
- Hypothesis 4: Career satisfaction among registered dietitians in management roles will be negatively associated with intent to leave their current jobs.
- Hypothesis 5: Job satisfaction among registered dietitians in management roles will be positively associated with career satisfaction.

- Hypothesis 6: Intent to leave current jobs among registered dietitians in management roles will be positively associated with intent to leave the profession.

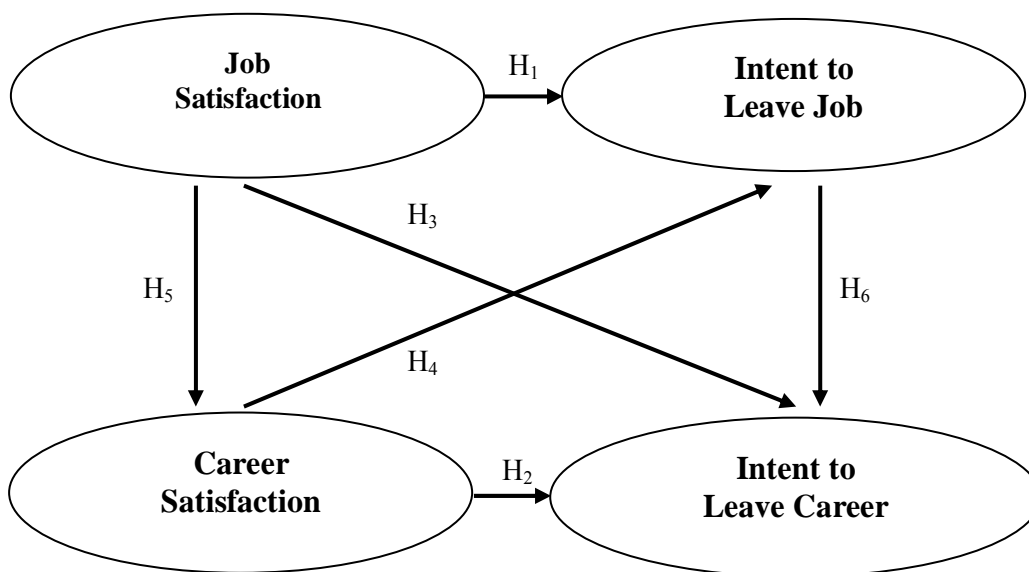


Figure 1.1: Hypothesized Relationships

Additional Variables of Interest

Some literature suggests a possible link between professional involvement and identity with job and/or career satisfaction (Apker, 2003; Lui, Ngo, & Tsang, 2001; Mael & Ashforth, 1992). These findings are consistent with the limited research about dietitians and work and/or career satisfaction (Mortensen, Nyland, Fullmer, & Eggnett, 2002; Sauer et al. 2007; Stone et al., 1981a, Stone et al., 1981b). It is possible that elements which reside outside of the actual employment setting, such as professional involvement, may significantly influence both job and career satisfaction among dietitians. Therefore, professional involvement and identity of

dietitians will be included as variables of interest in this study at this point. The applicability and role within the research model will be further assessed upon data analysis.

Significance of Study

This study is significant because it will contribute to the literature and the dietetics profession. The ADA wants to understand more about the factors that impact the careers and retention of registered dietitians through structured research. The purpose and objectives of this study parallel the current research needs of the ADA. A renewed baseline of perceived job and career satisfaction among management dietitians also provides a theoretical framework for future research involving advanced research models and variables across other dietetics practice areas.

This is the first attempt to concurrently examine multiple facets of both job and career satisfaction among management dietitians. It is important to know the current state of both job and satisfaction so that future research can be compared and if needed allow for adjustments. In addition, this study measures intent to leave among dietitians and then further assesses any relationships to satisfaction or dissatisfaction.

The findings of this research are also tangible because current insight about job and career satisfaction provides guidance for supporting current and future practitioners. The results of this study can assist the ADA in revising or enhancing continuing education, designing professional support, and developing intervention strategies to maintain or improve interest in the profession, particularly the management sector. As management dietitians progress through their jobs and career paths, ADA can also provide direct and specific assistance at distinct stages such as during role changes, promotions and additional responsibility.

Management dietitians will be retiring in record numbers (Gregoire & Greathouse, 2008; U.S. Department of Labor, 2008); therefore it is important that the management sector of the

profession remains inviting to successive dietitians. As discussed previously, findings of this research also impact current key discussions and decisions that affect the academic preparation of dietitians.

This study is important because it enhances the understanding about the specific facets of job and career satisfaction; something that has not occurred in recent years among dietitians. Previous research indicates that dietitians are generally dissatisfied with some specific work and career related factors such as income. Therefore, this study will elaborate on multiple facets of satisfaction. Current information also reveals that management dietitians are among the highest paid, but share in multiple and increasing responsibilities. Although management dietitians are paid more when compared to other dietitians, it is unknown if factors such as pay, promotion or benefits are dissatisfying to them. Data of this nature would assist human resource administrators and the ADA in remaining competitive and supportive to management dietitians.

Limitations of Study

Limitations are a reality to all research endeavors. Limitations of this study relate mostly to the proposed methods, which are discussed in greater detail within the methodology chapter (Chapter 3). These limitations include issues with sample selection and representation of the dietetics population, ability to generalize the results beyond the sample, the use of survey methodology and use of Internet for data collection. Other limitations involve the timing and sensitive nature of gathering data related to one's job and/or career.

The sample of dietitians selected for this study includes members of specific dietetic practice groups (DPGs). Membership in both the ADA and DPGs are voluntary and also require membership fees. The 2008-2009 membership listings for four management-related practice groups will be used to identify the population and further defined by those DPG members with

active email addresses listed. This selection process limits the ability to generalize the findings due to the lack of information gathered from those who are not members of ADA or who have not provided email addresses.

This study sought to assess job and career satisfaction specifically among registered dietitians in management roles. Belonging to a DPG is voluntary and typically based on specific interest in various sub-areas of dietetics practice. However, membership is also open to any member of the ADA and thus could include non-RDs and those not actually involved in management activities. Therefore, demographic information in the survey instrument will limit the sample to registered dietitians whose primary work involves specific management functions.

The literature suggests that professional involvement, such as membership in professional organizations such as ADA, is positively related to satisfaction. Therefore, collinearity is possible given the fact that membership in at least two professional affiliations (ADA and a management-related DPG) would exist parallel to the measurement of professional involvement and satisfaction. Therefore, reported data and subsequent results are limited because insight will not be gathered from dietitians who are not members of ADA. In turn, explaining the effects that lack of professional involvement might have on job or career satisfaction will be difficult to determine.

Another limitation specific to self-reported surveys is difficulty in knowing if those who choose not to respond would differ significantly from those who do respond. It is possible that those who are extremely satisfied or dissatisfied, or currently anticipating leaving their jobs or careers, may or may not complete and return the questionnaire. Multiple attempts to contact non-respondents were made in order to delimit non-response bias.

An online survey instrument was used for this study. Dillman (2007) points out that some limitations exist with online survey methodologies. For example, sophistication with different technologies or differences in computer operating systems may limit some from receiving or responding to the survey instrument. In addition, an online survey can only reach those participants with access to a computer. However, Dillman suggested that certain populations such as those belonging to professional organizations and government employees exhibit few problems with email coverage. An initial review of the membership listings for this study indicated that greater than 90% of those listed had email addresses. The few limitations expressed in using Internet-based survey methods were outweighed by the significant benefits such as cost effectiveness, fewer steps to complete the survey, and the automated collection of large amounts of data.

Another limitation inherent to the study of job and career satisfaction is the sensitive nature of information requested. Although the methods used to distribute the survey instrument and to collect data maintained confidentiality and anonymity, requests for sensitive job-related information such as perceptions about pay, co-workers and supervisors, may have inhibited some responses. The measures taken to maintain confidentiality and anonymity were reiterated to the participants throughout the data collection process.

Finally, the various elements and overall levels of satisfaction and intent to leave assessed in this study were limited to those facets specifically measured by the instruments used. Since the measurements in this study were gathered at one point in time, responses could have been altered by those dietitians experiencing extremely high or low feelings about their jobs or careers due to various circumstances during data collection phase. Accordingly, the variables most

likely to be associated with satisfaction and/or dissatisfaction among professionals similar to management dietitians over a continuum of time were assessed.

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CHAPTER 2 - REVIEW OF LITERATURE

The following work summarizes relevant literature in two major areas: job satisfaction and career satisfaction. To support the objectives and theoretical basis of this study, the literature review further outlines original theories and variables serving as antecedents and consequences to both satisfaction constructs. Since the objectives and purposes of this study involve dietitians with management responsibilities, job and career satisfaction research conducted among practicing dietitians is included. Finally, methods used in measuring the aforementioned variables are examined.

Job Satisfaction

Job satisfaction, or the extent to which people enjoy their jobs, is the most studied variable in organizational behavior research (Spector, 2000). Because job satisfaction has an impact on both the individual and the organization, determining the factors that lead to job satisfaction or dissatisfaction and related consequences are important.

Classical Perspectives about Job Satisfaction

Although often aligned with research and discussions about employee motivation, traditional motivation theories lend support for describing and understanding employee satisfaction and dissatisfaction in this study. Accordingly, Frederick Herzberg (1982) theorized that there are factors involved in job satisfaction and motivation but different factors that lead to dissatisfaction. Thus, two distinct continuums of satisfaction and dissatisfaction are illustrated Herzberg's theory. More specifically, the opposite of job satisfaction is not job dissatisfaction,

but rather, no job satisfaction; and, similarly the opposite of job dissatisfaction is not job satisfaction, but no job dissatisfaction.

Herzberg's two-factor theory indicated that motivators involve the content of the job. Specifically, motivators include achievement, recognition, responsibility and advancement. Factors related to dissatisfaction are called hygiene factors and relate more to the work environment such as pay, supervision, job security, working conditions, policies and relationships (Herzberg, 1987). In more applicable terms, Herzberg's theory suggests that managers should ensure that hygiene factors are not missing, which provides that employees are "not dissatisfied". However, managers should also set forth the opportunity to experience motivation factors for employees. By addressing both satisfaction dimensions, the end result is theorized to be a motivated and satisfied employee.

Continuing with Herzberg (1987), the working environment impacts workers and is typically aligned with providing one's basic needs. Thus, the working environment can provide fulfillment and job satisfaction, along with providing the individual with status. Accordingly, Herzberg, Mausner, and Synderman (1959) claimed that feelings of achievement and recognition are frequently associated with job satisfaction.

Abraham Maslow also developed a theory of motivation which stated that needs are organized in a proponent hierarchy (Maslow, 1970). In Maslow's theory of self-actualization, physiological needs, such as hunger and shelter, must be satisfied first before one can move to the satisfaction of other needs.

Maslow, Stephens and Heil (1998) also indicated that identity may moderate the relationship between self, work and one's profession. Related, Maslow (1970) suggested that self-actualized people are devoted to something which is very important to them and thus, tend to

believe that their work choice was meant to be. Maslow further stated that self-actualizing people tend to be dedicated and devoted to their profession and/or vocation.

Conceptual similarities exist with Maslow's hierarchy and Herzberg's continuums with regards to work satisfaction. For example, while Maslow described needs and motives for satisfaction, Herzberg provided insight about the goals and rewards that may satisfy similar needs. In addition, status within an organization is often described by job title or position and obtained through competence and achievement. Similarly, status is also a function of esteem, with esteem needs related to both maintenance and motivation elements.

Expectancy theory suggests that motivation is a function of individuals' perceptions of their environment and the expectations they form based on these perceptions (Fudge & Schlacter, 1999). Expectancy implies that people positively motivated toward work when their accomplishments lead to satisfaction. Vroom (1964) also suggested that there exists a delicate relationship between job satisfaction and the rewards such as pay that people receive from their work. He further stated that workers experience satisfaction to the extent that their jobs provide them with what they want.

The varying relationship that pay has with job satisfaction is intriguing and discussed in greater detail later. However, regarding dietitians and overall job satisfaction, expected pay and rewards with work may share conceptual similarities with expectancy theory.

Additional Insights about Job Satisfaction

For researchers today, the task of determining what factors are needed to achieve a high degree of satisfaction is complex, and is further complicated by the changing workplace and workforce composition (Chambers, 1999; Frank, Finnegan, & Taylor, 2004). Following is a summary of more contemporary research related to factors that may impact employee

satisfaction or become a result of dissatisfaction. Often, the job satisfaction research and/or measurement methods emulate the conceptual foundations set forth by Herzberg, (1987), Maslow (1970), and Vroom (1964).

Antecedents to Job Satisfaction

Factors that affect worker satisfaction are numerous within the published literature and generally are attributed to both the person and the organization. In early research, Hackman and Oldham (1975) designated five job-related characteristics that influence job satisfaction: skill variety, task identity, task significance, autonomy, and job feedback. Today, other commonly researched factors that may or may not influence job satisfaction include pay, level of education, age, and gender (Spector, 2000). However, results of research exploring the relationship between demographic variables and other factors are inconsistent, thus limiting researchers' ability to draw firm conclusions. Lambert, Hogan, and Burton (2001) suggested two general categories believed to influence job satisfaction: demographic variables and work environment factors.

Brush, Moch, and Pooyan (1987) conducted a meta-analysis to examine core demographic characteristics associated with job satisfaction including age, gender, tenure, education and race. The meta-analysis was based on an examination of 21 studies and 10,192 subjects. Of the variables examined, the only relationships to approach significance with job satisfaction were age and organizational tenure. No correlation was found between satisfaction and either education or job tenure. Considerable variance was left unexplained among distributions after correcting for sampling error. When further analyzed, the type of organization moderated the role in the relationships between certain demographic variables and job

satisfaction. For example, males were satisfied with jobs in the private sector but not within government organizations.

Pay is an important characteristic of job satisfaction. The pay that an individual receives for the work performed is of major significance to both employees and employers (Seybolt, 1976). While pay may be an obvious factor related to attitude toward work, Seybolt identified two other critical aspects of worker satisfaction, variety and complexity of work. A direct link between job satisfaction and pay is not conclusive and is inconsistent. Studies also find weak correlations between wages and overall satisfaction, but suggest stronger evidence that satisfaction, as it relates to pay, is more related to how an individual perceives pay equity with others doing the same work (Rice, Philips, & McFarlin, 1990; Spector, 1985, 2000).

Age has been examined as a variable related to job satisfaction in numerous studies. Herzberg, Mausner, and Synderman (1959) suggested that a significant relationship exists between age and job satisfaction, while Spector (1997) indicated that conclusions involving age and satisfaction remain inconsistent. Some researchers suggest a cyclical approach to satisfaction at different career stages where satisfaction is higher during initial employment, declines as the employee progresses through their 20's and into their early 30's, but then rises through the end of the career cycle (Hoppock, 1960; Birdi, Warr, & Oswald, 1995). Salah and Otis (1964) found a similar cycle with job satisfaction and age in their research. However, they observed dissatisfaction among participants just prior to retirement.

Another factor related to job satisfaction is gender. Some research has shown that gender and job satisfaction are related, while others contend the relationship is inconsistent or with few significant differences (Brush et al, 1987; Gruneberg, 1979; Spector, 1997). Research shows that women want the same things that their male counterparts have traditionally sought

such as high pay and promotions (Mottaz, 1986; Scozzaro & Subich, 1990). Other researchers suggest that women are more satisfied when they receive emotional support through their working relationships (Scozzaro & Subich, 1990; Powell & Mainiero, 1992). Further, researchers also suggest that men may not be as interested in traditional career payoffs and seek greater satisfaction from their working relationships and the ability to balance work and family (Mintz & Mahalik, 1996).

Level of education yields a variety of results as evidenced by both early and more recent research. In a comparison among managers with and without college education, Klein and Maher (1966) found managers without a college education to be more satisfied with pay than college-educated managers. Others have reported no relationship between level of education and job satisfaction (Gordon & Avery, 1975; Sinha & Sarma, 1962). More recent evidence using path analysis suggests that the effects of education on job satisfaction are mainly indirect and moderated though the influence of schooling on workers' health status, wages and other job characteristics (Florit & Lladosa, 2007).

Ganzach (2003) suggested that the positive effect of education on job satisfaction may be due to more highly educated people securing more rewarding jobs, thus gaining more satisfaction from their jobs. A negative effect may be related to expectations about job rewards which may increase with level of education.

Consequences of Job Satisfaction

Satisfaction or dissatisfaction with work incurs significant consequences at both the personal and organizational levels. O'Driscoll and Beehr (1994) reported that dissatisfied workers reported more frequent problems with sleep patterns than satisfied employees. Others have found correlations between job dissatisfaction and anxiety, depression and hostility

(Packard & Motowidlo, 1987). Satisfaction or dissatisfaction with work may also play a role in physical and mental well-being and even length of life (Spector, 2000).

Locke (1983) suggested that a person's perception of work is strong enough to affect one's attitude towards life, family and self. Therefore, it seems reasonable that another factor of job satisfaction is with its relationship with overall life satisfaction. Some research suggests that those satisfied with life are also satisfied with their jobs and vice-versa (Rain, Lane, and Steiner, 1991). Three general models encompass the relationship between job and life satisfaction: spillover, compensation, and compartmentalization (Brady, 1980). The spillover model suggests that satisfaction or dissatisfaction with one facet of a person's life, for example work satisfaction, can spillover and affect satisfaction with another part of life (Brady, 1980). Second, some workers may experience dissatisfaction with work and compensate for it in other areas of life. Finally, compartmentalization suggests that some people maintain a distinct separation between job satisfaction and other factors related to life satisfaction.

In more recent research, Rode (2004) outlined additional perspectives regarding the relationship between job satisfaction and life satisfaction. The first perspective suggested that job satisfaction influences life satisfaction because satisfaction with one's work is actually a foundational part of life satisfaction. This approach, called the "bottom up" perspective, proposes that life satisfaction is influenced by satisfaction with various life domains such as work, family and health and therefore, life and job satisfaction are inclusive.

Rode (2004) also reviewed a second "top down" approach with the notion that life satisfaction influences satisfaction with one's job. With this model, the general assumption is such that heightened satisfaction with life leads to greater job satisfaction. The third approach outlined by Rode suggests no relationship between the satisfaction with life and work due to the

numerous confounding variables independently affecting both domains of satisfaction. A limitation to the overall life satisfaction viewpoint is the lack of research about whether life satisfaction affects job satisfaction or vice-versa (Rode, 2004).

A common denominator in most research about job satisfaction is the relationship between satisfaction and job performance (Spector, 1997). At the simplest level, if one is satisfied with his or her job, then he or she will perform at a higher level, be more productive and thus, better support the organization's mission and objectives. Since job satisfaction and dissatisfaction directly affects the person, behaviors related to satisfaction often serve as predictors of performance within organizations.

Specific employee behaviors associated often with satisfaction and dissatisfaction includes job performance and productivity (Iaffaldano & Muchinsky, 1985; Judge, Thoresen, Bono, & Patton, 2001), organizational citizenship (Organ & Ryan, 1995), employee absenteeism (Wegge, Schmidt, Parkes, & van Dick, 2007) and turnover (Hellman, 1997; Lambert et al., 2001).

Productivity and performance are paramount in an organization. Simple reasoning would suggest that employee performance is strongly correlated with employee satisfaction. Judge et. al (2001) identified relationships that have served as the guide for satisfaction-performance relationship and research objectives for nearly 40 years. The theoretical perspectives outlined by Judge were:

- job satisfaction causes job performance
- job performance causes job satisfaction
- a reciprocal relationship between job satisfaction and job performance
- a spurious relationship between job satisfaction and performance

- relationship between job satisfaction and performance moderated by a variety of factors
- no relationship between performance and satisfaction

Measuring the relationships between job performance and satisfaction remains common practice but inconclusive. A meta-analysis conducted by Iaffaldano and Muchinsky (1985) among 74 studies (N = 12,192) and 217 satisfaction-performance correlations found an overall population correlation between the variables was 0.17. Interestingly, this observation is not dissimilar to what Vroom observed nearly 20 years earlier (0.14) (Vroom, 1964).

A more recent analysis (Judge et al., 2001) involving 254 studies from 312 samples (total N = 54,417) between the years 1967 – 1999 about the relationship between satisfaction and performance yielded interesting results. When corrected for measurement unreliability, the correlation between overall satisfaction and performance was 0.30. Moreover, observed satisfaction levels using global measurement methods did not vary significantly from results using multi-faceted measurement models (Judge et al., 2001). Judge's research also found that the variability in correlations between satisfaction and performance across studies could not be determined, but the relationship was found to be moderated by job complexity. More specifically, higher complexity jobs revealed a stronger relationship with performance than lower complexity jobs. Judge et al. also found 25% fewer published studies about the relationship between satisfaction and performance from the 1990s as compared to the 1980s suggesting declining interest in these variables.

Given the vast numbers of studies about the relationship between job satisfaction and organizational citizenship behavior (OCB), Organ and Ryan (1995) conducted a meta-analysis to further examine this phenomenon. Organ and Ryan's review spanned four leading research

journals between 1983 to 1994. Their research findings suggested a modest relationship between organizational citizenship behavior variables and job satisfaction. More recent research by Fassina, Jones, and Uggerslev (2008) used meta and path-analysis to analyze the role of fairness and general job satisfaction as a predictor of OCB. Results suggested that job satisfaction accounted for variance in all five OCB dimensions (altruism, conscientiousness, courtesy, civic virtue, and sportsmanship).

Other insight comes from the informal set of beliefs, perceptions and obligations between an employee and employer called psychological contracts (Cullinane & Dundon, 2006). Employee dissatisfaction can result from perceived violations of psychological contracts in terms of less than desirable pay or working conditions.

Dissatisfied employees may behave differently than satisfied employees not only in regard to actual work performed but also in stability, absence and tenure (Spector, 1997). Absenteeism and turnover are costly, counterproductive and recurs as a variable related to job satisfaction in empirical work (Smith, 1992). One of the important consequences of dissatisfaction is when it causes an employee to leave the organization.

According to a survey conducted by the U.S. Bureau of Labor Statistics (Department of Labor, 2008), the number of “total separations” among US firms is further categorized by quits, discharges and layoffs, and other separations such as retirements. As of July 2008, 54% of the total separations in the United States were voluntary separations or quits. Although the frequency of separations devoted to those who voluntarily quit their job varies from industry to industry, the highest proportion (74%) of voluntary termination occurred within the foodservice industry (DOL, 2008). The costs incurred due to employee turnover are numerous including lost

productivity, increased training costs, customer service and loyalty issues, and lower morale. However, attributing employee turnover directly to job dissatisfaction is not straight forward.

Like most variables related to job satisfaction, the relationship with intent to leave the job or organization again reveals mixed and inconclusive evidence. A review of several studies by Hellman (1997) suggests a moderate relationship between job satisfaction and desire to leave. When standardized, Hellman described a one-half increase in standard deviation with regards to intent to leave for each unit of reduced satisfaction. Hellman also found differences between age groups and work settings with regards to intention to leave. For example, federal employees under the age of 50 were significantly more likely to leave as compared to their older counterparts. Federal employees with more tenure were less likely to leave their organizations than private sector participants across levels of job satisfaction (Hellman, 1997).

The EVLN (Exit, Voice, Loyalty, and Neglect) Model suggests that dissatisfaction with work may determine specific actions taken by an employee (Rusbult, Farrell, Rogers, & Mainous, 1988). The four responses by an employee include quitting or thinking about quitting (Exit). Voice suggests a proactive approach to discussing concerns with coworkers and others in an effort to improve conditions. Loyalty implies remaining patient with optimism that things will improve while neglect suggests a passive response to letting performance and/or productivity slowly deteriorate.

Lambert et al. (2001) examined the structural path relationships of turnover intent in regards to demographics, work environment, job satisfaction and alternative job possibilities. A national sample of adult workers was utilized (N = 1,095). In general, job satisfaction was highest among those with jobs that allowed variety and positive co-worker relationships. Females were more satisfied than male workers, and older workers were more satisfied than their

younger counterparts. Overall, role conflict had a negative effect on satisfaction. However, opposite to most empirical research, results in this study suggested that tenure had a negative effect on job satisfaction, possibly due to how tenure was defined across organizations. In conclusion, Lambert et al. (2001) found that job satisfaction exhibited the largest direct effect on turnover intent while lack of other employment opportunities reduced the likelihood of turnover intention.

In similar research, Griffeth, Hom and Gaertner (2000) assessed 42 studies and 500 correlations of employee turnover and various moderators of antecedent-turnover relationships. The meta-analysis was refined as compared to other studies in that it included three additional criteria: 1) actual employee turnover rather than intention to leave, 2) studies that collected predictor measures before actual turnover occurred, and 3) research conducted where turnover was measured at the individual level. Results showed no correlation between cognitive ability and turnover. Women's quit rates were similar to that of men's and no relationship existed between race and turnover. The meta-analysis also yielded convincing evidence that various factors of job attitude predicted turnover, with overall job satisfaction being the best predictor of turnover. When the various dimensions of satisfaction were examined, work satisfaction displayed the strongest relationship to turnover among all facets of satisfaction.

Job Satisfaction Measurement

Studies of job satisfaction have been ongoing for several decades using both general and multi-dimensional measurement methods (Spector, 2000). Generalized job satisfaction research, traditionally called global or general job satisfaction measurement, establishes an overall level of satisfaction with one or few measurement items, while dimensional measurement establishes several facets serving as antecedents or mediators to satisfaction. Common variables measured

often include financial rewards, working conditions, co-workers, security, and content of the job (Cranny, Smith, & Stone, 1992; Spector, 1997).

There are numerous job satisfaction scales which have been developed and validated over the years. The number of measures explored by each instrument determines the amount of data received, leading to the use of general versus multi-faceted measurement tools of job satisfaction. Instruments common to many job satisfaction research models include the Faces Scale (Kunin, 1955), Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, Lofquist, & England, 1966), the Job Satisfaction Survey (JSS) (Spector, 1985), the Job Diagnostic Survey (JDS), and the Job Descriptive Index (JDI) (Smith, Kendall, & Hulin, 1969).

The Job Descriptive Index is a popular satisfaction measure as evidenced by its use in over 100 studies (Smith, 1992). The JDI measures five areas of satisfaction including work, pay, promotion, supervision, and co-workers (Spector, 2000). The JDI uses 72 items associated with an adjective or brief job task descriptor. Responses to the survey are “yes,” “uncertain,” or “no.” The Job Satisfaction Survey (JSS) measures nine areas of satisfaction including pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers and nature of work. The Job Diagnostic Survey (JDS) measures the effect of job characteristics on people, with one of the characteristics being job satisfaction (Spector). The MSQ measures job satisfaction based on 20 psychological needs and includes a general satisfaction score, an intrinsic factor score, and an extrinsic factor score. The faces scale uses an eight-level graphical display of pleasure or displeasure with work (Kunin, 1955).

Intent to Leave Measurement

Fishbein and Ajzen's (1975) historical research prescribed that one's intent to behave a particular way serves as the best predictor to the actual behavior. Cranny et al. (1992) stated that job satisfaction impacts employee behavior. Researchers further believe that job satisfaction shares a negative relationship with turnover intent (Tett & Myer, 1993) and that intent to leave is the best predictor of actual voluntary turnover (Lambert et al., 2001; Spector, 2000; Steele & Ovalle, 1984; Tett & Meyer, 1993). Theoretically, when one reaches the point of intent to leave, various withdrawal precursors develop, typically leading to work departure. Accordingly, meta-analytic procedures conducted by Lambert et al. (2001) and more recently by Hayes et al. (2006) confirmed that intent to leave measurement has been integrated into the majority of research models that examine both job satisfaction and voluntary intent to leave.

Mobley (1977) is often credited with the theory that a primary concern and consequence of job dissatisfaction is a cognitive thought process that includes thinking about quitting, leading to intentions of job searching and actual job searching, initiating intention to quit thoughts and finally, withdrawal decisions and actual departure from the organization. Follow-up work by Mobley, Horner and Hollingsworth (1978) measured both general and facet job satisfaction along with intent to quit of hospital employees. Intent to quit was assessed by measuring thoughts about quitting, perceived probability of finding another job and the intention to quit. Accordingly, today's studies continue to utilize the measures developed by Mobley to assess intention of leaving in terms of job satisfaction and career motives (Castle, Engberg, Anderson, 2007; Hsu, Jiang, Klein, & Tang, 2003).

A variety of simplistic measures, often with two or fewer items, have been used to measure intent to leave in more recent research. In an examination of withdrawal attributes and leave intention among nurses, Krausz, Koslowsky, Shalom and Elyakim (1995) utilized a three-phase approach with the single-item “Do you intend in the near future to . . . change wards, leave the hospital, and leave the profession?” Response choices included “not at all (1) to definitely yes (5)”. Similarly, in a study among athletic trainers about the relationships between role complexity, job satisfaction and intent to leave, Brumels and Beach (2008) utilized general single-item measures for both job satisfaction and intent to leave constructs. Specifically, respondents were asked to rate their thoughts on leaving with a scale anchored (1) never to (4) frequently. Elevated scores indicated increased consideration for leaving.

Stone et al. (2007) investigated specific causes of ICU nurses’ intention to leave and the relationship to organizational climate and departmental policies. This research also took into account labor market conditions in predicting leave intent. Respondents’ plan to leave was measured again by a single self-reported item, "Do you plan to leave your current position in the coming year?" Taking this measure further, Stone et al. also gathered open-ended responses from those who expressed their intent to leave.

Finally, through meta-analysis, Lambert et al. (2001) found general consensus among the empirical literature in using the following single-item measurement: “Taking everything into consideration, how likely is it that you will make a genuine effort to find a new job (with another employer) within the next year.” Scaled responses included, very likely, somewhat likely, or not likely at all. A significant amount of published research suggests single-item measurement among studies that include intent to leave as a variable.

Job Satisfaction in Dietetics Practice

A modest number of studies have examined job satisfaction among dietetics professionals, with the majority of the research being conducted 25 or more years ago (1968 – 1990). A review of this early literature illustrates a number of traditional research methods, variables and general results related to job satisfaction among dietitians (Table 2.1).

Table 2.1: Summary of Job Satisfaction Research in Dietetics Practice Prior to 1993

| Researchers | Sample Description | Response Rate | Measurement |
|------------------------------------------|-----------------------------------------------------------------------|--------------------------------|-----------------------------------------|
| Tansioqkun & Ostenso (1968) | Hospital Dietitians ADA members | n = 125 Response rate – 72% | Management Position Questionnaire |
| Calbeck, Vaden, & Vaden (1979) | Hospital Dietitians ADA members | n = 323 Response rate – 75% | Job Descriptive Index |
| Vermeersch, Feeney, Wesner & Dahl (1979) | Public Health Nutritionists RDs versus non-RDs not indicated | n = 38 | Self-derived questions |
| Myrtle (1978) | Foodservice Administrators and Dietitians | n = 69 dietitians | Four open-ended questions |
| Agriesti-Johnson & Broski (1982) | ADA Members | n = 603 Response rate – 59% | Job Descriptive Index |
| Sims & Khan (1986) | Public Health Nutritionists | n = 584 Response rate – 59% | Index of Organizational Reactions |
| Rehn, Stallings, Wolman, & Cullen (1989) | South Carolina Dietitians | n = 211 Response rate - 52% | Job Descriptive Index |

| | | | |
|--------------------------------|-----------------------------------------------------------------------------|--------------------------------|-------------------------------------------------|
| Kuntz, Borja, & Loftus, (1990) | College Foodservice Managers (contract) RDs versus non-RDs not indicated | n = 256 Response rate – 75% | Index of Organizational Reactions Questionnaire |
|--------------------------------|-----------------------------------------------------------------------------|--------------------------------|-------------------------------------------------|

Some researchers found lower levels of job satisfaction of dietitians (Agriesti-Johnson, & Miles, 1982; Broski & Cook, 1978). However, among dietitians in certain roles, Agriesti-Johnson and Broski (1982) also found higher satisfaction among community dietitians. Calbeck et al. (1979) also found higher satisfaction among dietitians as compared to foodservice employees within the same organizations. Myrtle’s work in 1978 is difficult to generalize as the sample was very limited, utilizing attendees at a professional conference as the sample and the use of 3-question instrument regarding likes and dislikes of work. Vermeersh et al. (1979) examined work satisfaction among public health dietitians and found less satisfaction but also more levels of job-related stress when compared to other groups.

In the 1980’s, Sims and Khan (1986) examined satisfaction among public health nutritionists in community settings and found moderate levels of overall job satisfaction. Higher levels of satisfaction were with co-workers and nature of the work, moderate satisfaction with supervision, and low satisfaction with pay. Overall satisfaction was also associated with various work-related values such as utilization of abilities, challenging work, opportunities for advancement, and the opportunity to assist in policy decisions. Upper-level managers demonstrated the highest overall job satisfaction scores.

Rehn et al. (1989) assessed job satisfaction among dietitians using the Job Description Index (JDI). The researchers assigned five job titles including administrative, clinical, community, consultant, and educator. The results found consultants and administrators significantly more satisfied with pay than clinical and community dietitians. Community

dietitians were significantly more satisfied with their supervision than consultants and administrators. Dietitians who supervised more than 20 others were more satisfaction with pay. Dietitians were most satisfied with the general nature of their jobs, and least satisfied with promotion.

Research within the last 15 years in dietetics practice is available but limited in scope and frequency. In 1993, Dalton, Gilbride, Russo, and Vergis examined job satisfaction of dietitians in New York City. Satisfaction was measured based on registration status, work status and professional position using the Job Descriptive Index (JDI). The sample included dietitians with specialization in clinical, community and long-term care. Nearly 60% of the sample (n=409) were registered dietitians while 60% and 51.8% of the community nutritionists and long-term care professionals respectively, were non-RDs. Mean JDI scores suggested that dietitians in this study were much less satisfied, specifically with work, pay and promotion, than dietitians in two previous studies (Agriesti-Johnson, & Miles, 1982; Rehn et al., 1989) using JDI.

When comparing RDs to non-RDs, Dalton et al. (1993) found that RDs were significantly more satisfied than non-RDs with respect to work, pay, promotion and the job. When sorted by practice area (management, staff nutritionist, and private practice/consulting), consultant dietitians were more satisfied than management dietitians, but those in management roles were more satisfied overall than staff dietitians in terms of pay, promotion and the job in general.

Mortensen, Nyland, Fullmer and Eggett (2002) examined the relationship between professional involvement and job satisfaction among 2,600 registered dietitians. Job satisfaction was measured using the Brayfield-Rothe Index of Job Satisfaction and correlated with professional markers. Overall, dietitians reported a high degree of job satisfaction and a positive relationship between job satisfaction and all levels of professional involvement.

Numerous studies involving job satisfaction continue among a variety of occupations and work settings. However, the employment conditions and environments in which dietitians work have changed dramatically over the last decade (Jarratt & Mahaffie, 2002; Canter & Nettles, 2003; Mathieu, 2008), and therefore job satisfaction obviously warrants renewed investigation. Unfortunately, recent job satisfaction research among dietitians is nonexistent or extremely limited in focus and depth of examination. Finally, no research models involving dietitians, job satisfaction and job turnover intent were evident in the published literature.

Career Satisfaction

Merriam-Webster (2008) defines a career as “a profession for which one trains and which is undertaken as a permanent calling”. Therefore, the terms career and profession were used interchangeably in this research. Career satisfaction has been described as the satisfaction originating from extrinsic and intrinsic aspects of a person’s career to include salary, advancement and opportunity for career development (Greenhaus, Parasuraman, & Wormley, 1990; Judge, Cable, Boudreau, & Bretz, 1995). The literature revealed that satisfaction has been examined at specific career stages among professionals such as entry-level (Stone, Vaden, & Vaden, 1981a, 1981b), mid-career (Auster & Ekstein, 2005), and later career phases (Armstrong-Stassen & Cameron, 2005). Most studies used cross-sectional samples and controlled the analysis for career stage by assessing length of time within the career, organization, and/or age of the participants.

Formal analysis of career satisfaction among professionals became more evident in published research around the early 1990’s. However, it also lacks the frequency of examination and degree of theoretical underpinnings compared to its counterpart, job satisfaction. Keyword

searches among various academic databases revealed a number of studies and reports related to this construct. Closer examination showed that many studies which seemed to be about career satisfaction actually measured job satisfaction. Theorists suggest that although the satisfaction constructs share some commonalities, they are different in the underlying nature and consequences and thus, warrant focused review and examination (Brady, 1980; Collins et al., 2000; Judge et al., 1995; Lounsbury et al., 2003).

Although career satisfaction has not received the recognition and extensive assessment as job satisfaction, evidence does reveal a variety of factors that serve as antecedents, consequences and predictors of career satisfaction. Assessments of career satisfaction include numerous variables such as type of occupation, organization policy and support, race, gender, personality, performance, age, job content, work-life balance and intent to leave the career.

Career Satisfaction Research

Many career satisfaction studies in the last 20 years refer to the work of Greenhaus et al., (1990) for guidance on career satisfaction examination and tested measurement methods. Greenhaus and colleagues examined relationships among race, organizational experiences, job performance evaluations, and career outcomes for black and white managers in the communications, banking and electronics fields. The basis for the study was that job performance evaluations influenced career advancement and career satisfaction; the two constructs that defined career outcome in this study. Further, it was proposed that organizational experiences and job performance mediated the impact of race on career outcomes.

Greenhaus et al. (1990) designed five items specifically for this study (discussed in greater detail within the career measurement section of this chapter) to measure career satisfaction. Reported data suggested moderate support for the relationship between

performance evaluations and career outcomes. Performance evaluations had a direct effect on promotability assessments and career plateau status but not on career satisfaction. Various organizational experiences had direct effects on career outcomes such as assessments of promotability, low incidence of career plateauing, and high levels of career satisfaction. Job discretion was associated with unfavorable advancement prospects but high levels of career satisfaction, while career strategy behaviors negatively related to career satisfaction.

More recent studies about career satisfaction involve women. Armstrong-Stassen and Cameron (2005) examined organizational and individual characteristics related to career satisfaction of Canadian females over the age of 50 and further categorized the sample into two groups: those working in managerial (n=90) and professional (n=90) capacities. Personal correspondence with the lead researcher suggested that differentiation between professional and managerial status was necessary due to prior research among registered nurses (M. Armstrong-Stassen, personal communication, October 15, 2008). Armstrong-Stassen found self-reported differences between nurses involved in direct patient care (front-line nurses) and those who are in managerial roles (nurse managers or nurse leaders) when describing work roles. More specifically, both groups of nurses are considered to be professionals, however, nurse managers perform in a supervisory capacity with access to different types of resources as compared to front-line nurses do not have supervisory responsibilities yet perform different job duties. This description is consistent to dietitians, since RDs might likely indicate that their profession is “dietetics” and that they work as dietetics professionals while they perform very different tasks.

In the study conducted by Armstrong-Stassen and Cameron (2005), the mean age of the sample was 54.6 years with an average of 13.5 years with the current organizations. Individual characteristics examined included length of time with the current organization along with job and

health status. Tenure was anticipated to be negatively associated with career satisfaction while health status was also expected to play a role in satisfaction. More specifically, women in better overall health were expected to exhibit greater satisfaction with their career than those in poorer health. Poor health was assumed to lead to less involvement in career-advancing opportunities offered to them. Health was assessed with responses to three self-reported items about overall health status. Organization-related factors examined included the likelihood of the organization to retain older managerial and professional employees, perceived support from one's organization, training opportunities provided to older managerial and professional women, and perceptions of career plateauing.

Armstrong-Stassen and Cameron (2005) examined overall career satisfaction with the aforementioned five-item career satisfaction scale developed by Greenhaus et al. (1990). Other variables were measured with adaptations from instruments found in empirical research. For females in both managerial and professional positions, perceived organizational support was significantly and positively related to career satisfaction, whereas job plateauing was significantly and negatively related to career satisfaction. Differences in perceived career satisfaction between the two groups were also noted. Tenure with the organization, perceived retention efforts, training opportunities, and job plateauing were significantly related to the career satisfaction of women in professional positions but not for women in managerial positions. Similarly, perceived health status was significantly related to career satisfaction for female managers but not for female professionals. Armstrong-Stassen and Cameron theorized that these differences may become more prominent with age as there is greater similarity between managerial and professional women in the earlier stages of their careers.

Regression analysis revealed that individual characteristics and organization-related factors accounted for 47% of the variance in the career satisfaction among the females in managerial roles and 43% among females in professional roles (Armstrong-Stassen & Cameron, 2005). For both groups, the organization-related factors accounted for a substantial amount of the variance in career satisfaction. Key career satisfaction predictors included being valued and having commitment from the organization, experiencing challenge and opportunity for development, and perceived health. Predictors of career satisfaction for females in professional positions included trust with the organization to retain older managerial and professional employees, challenge and opportunity.

Burke (2001a) surveyed work and career experiences and emotional well-being among females in managerial and professional positions in five countries: Bulgaria, Canada, Norway, the Philippines and Singapore. Work experiences were defined as challenging and visible assignments, acceptance in the organization, training and development opportunities, support and encouragement, and conflict and overload. Numerous measures were used to determine perceptions of work experiences. The five-item scale developed by Greenhaus et al. (1990) was used to measure career satisfaction.

Burke's (2001a) research suggested that work experience measures were correlated with indicators of career and job satisfaction and career success similarly in all five countries. Females in managerial and professional roles who reported more favorable work experiences also indicated greater job and career satisfaction, less intent to quit, and more optimistic future career prospects.

Burke (2001b) also examined perceptions of value within organizations, support towards work-life balance, satisfaction, and psychological and physical well-being among female

Canadian professional and managerial MBA graduates (n=291, 35% response rate). Career satisfaction was included in the model and measured using the five-item scale developed by Greenhaus et al. (1990). The data provided support that females in both managerial and professional positions reported more satisfaction with work, family, and career and less intent to leave and job stress when organizations were supportive of work-personal life balance. Higher levels of emotional well-being and less frequent psychosomatic symptoms were also reported with supportive organizational values.

Auster and Ekstein (2005) analyzed individual, career, job, organizational characteristics and stress factors that affect the career satisfaction of 125 female professional engineers at mid-career. Mid-career in this study was defined as having 15 years of experience in the field. Another objective of this work was to more closely define factors that affect career satisfaction among women in a predominately male profession. Individual characteristics in this study focused on parenting responsibilities such as time spent on childcare themselves versus by outside assistance and division of labor between spouses for child rearing. Career characteristics were categorized by career history (employment gaps and availability of flex-time options) and career support (measures of professional networking with other professionals). Organizational factors included gender distribution and culture of sex bias within the organization. Job factors examined included opportunities for growth and advancement, job autonomy, job creativity, job security and relationships with co-workers. Stress was measured by assessing the extent to which respondents felt they were under time constraints, valued by peers, balance between job and life outside of work and fatigue with office politics. Mid-career satisfaction was assessed with one item asking how often respondents seriously thought about moving into a career outside of engineering.

Results of Auster and Ekstein's (2005) research are summarized as follows. Factor analysis revealed that organizational variables were represented by two factors: incentives and advancement opportunities. Gender represented 58% of the model variance. Job characteristics were deduced to four factors: opportunities for growth and social interaction, opportunities for individuality, recognition and support; and job security. Individual characteristics loaded onto two factors, childcare responsibilities and number of children/stepchildren living with the respondents and accounted for 73% of the variance. Two-factors explained career characteristics and 65% of variance: peer interaction and experience with career disruptions. Finally, factor analysis among stress characteristics also resulted in two factors: stress caused by work-life trade-offs and work-related stress. These accounted for 54% of the model variance. Significant relationships with mid-career satisfaction included organizational factors, job characteristics, and work-related stress. Individual and career characteristics were not significantly correlated with mid-career satisfaction.

Career satisfaction data specific to male professionals has also been examined. Osherson and Dill (1983) examined the variation in family structure and timing of career entry on men's career satisfaction. Satisfaction was controlled by four variables that defined work-family structure: 1) marital role arrangement, 2) presence or absence of children in the family, 3) age of children, and 4) timing of career entry. Married men in single-career relationships perceived themselves as more successful than did men in two-career marriages. Fathers in one-career families reported less motivation as measured by self-actualization factors than did those in two-career families but did not differ in feelings of success. Childless men in two-career marriages felt less successful and less self-actualized at work than did fathers in the same type of marriage. Those men with recent entry into their career path felt less successful than men with more tenure.

Osherson and Dill's (1983) research explored family structure. Three types of family structure were identified; 1) single-career marriages with children, 2) dual-career marriages with children, and 3) dual-career marriages without children. When controlled for timing of career entry, men who followed "traditional life course" (single-career marriage and fatherhood) with early career entry were more likely to feel successful with work at midlife. Those with early career entry and marriage to a woman with a career, combined with fatherhood tended to be more satisfied with the self-expression and self-development elements of their careers. Put differently, the two groups of men identified with different elements of mid-career satisfaction. The authors theorized that men in the prior group (traditional career entry) identified more with the "provider" role and thus, expressed a different degree of satisfaction, whereas those in dual-career marriages shared marital roles and the financial advantage of two incomes, thus allowing greater flexibility in attitude toward career. These men were suspected to not identify with the term "provider" as such because the working role was shared with the working spouse and therefore revealed the self-actualized nature of this group. Among the final grouping, childless men involved with dual-career relationships exhibited a delayed entry to the career path. Said delay brought with it feelings of lower prestige and success. It was also suggested that the lack of parenting experience limited the feelings of ability to protect and provide, and therefore also limited one's assurance through self-esteem derived through work and marriage. In the end, men without children reported lower feelings of success and self-actualization at work.

Lounsbury et al. (2003) examined the relationships between personality and career satisfaction among 14 occupational groups (N = 5,932). Personality traits under investigation included assertiveness, conscientiousness, customer service, emotional resilience, tough-mindedness, extraversion, image management, intrinsic motivation, openness, optimism,

teamwork, and work drive. Professional occupation groupings included accounting, business/general, clerical, consulting, customer service, engineering and science, executive, financial services, human resources, information technology, management, manufacturing, marketing, and sales.

In addition to the other variables measured (personality traits and managerial styles), career satisfaction was generalized and gauged with one measurement item (Lounsbury et al., 2003). Overall, personality traits specifically associated to career satisfaction included conscientiousness, extraversion, assertiveness, customer service orientation, and human relations orientation. Regression analyses indicated that emotional resilience, optimism and drive accounted for 17% of the variance in career satisfaction measurement.

Career Satisfaction Measurement

A variety of measures have been used to assess career satisfaction, but lack the rich history and standardized scale development as job satisfaction measurement. Most career satisfaction measures also utilized fewer individual items than multi-dimensional job satisfaction research, but often share the objective of gathering the accumulation of perceptions about the span of one's jobs, related experiences and involvement.

Brady (1980) measured the degree of spillover between job satisfaction and career satisfaction among physician's assistants with job satisfaction and career satisfaction measured independently. Overall job satisfaction and the related facets (pay, work, promotion, supervisor and co-workers) were assessed using the Job Description Inventory (Smith et al., 1969). Cronbach's coefficient alpha estimates in this study were .80, .83, .88, .85 and .86 for each facet, respectively. Career satisfaction was assessed using an adaptation of the Index of Job Satisfaction (Brayfield & Rothe, 1951). Question wording was changed to reflect career

satisfaction perceptions rather than job satisfaction perceptions with responses based on a 7-point scale ranging from strongly agree to strongly disagree. Internal reliability measured by coefficient alpha was .82. The seven questions were:

1. "I am disappointed that I ever entered this career"
2. "I find real enjoyment in my career"
3. "I feel that my career is no more interesting than others I could be in"
4. "I feel that I am happier in my career than most other people"
5. "I definitely dislike my career"
6. "I consider my career rather unpleasant"
7. "I am often bored with my career"

Using exploratory research methods, Stone, Vaden, and Vaden (1981a; 1981b) adapted 32 items from Schletzer's Job Dimensions Blank (1965) to identify important components in a career and to assess career satisfaction among dietitians in their early career phases. To evaluate career satisfaction, the researchers calculated mean scores for each of the 32 characteristics and then coupled them with corresponding importance scores. Respondents' mean scores were then classified into three categories: most satisfying, somewhat satisfying and least satisfying. To evaluate motivation variable and effective satisfaction, scores were also computed to determine the interactive nature of important career components and sources of satisfaction. This score was obtained by multiplying satisfaction scores by importance scores for corresponding items. Finally, a composite score was computed to assess overall career satisfaction and then predictors of satisfaction outlined by way of multiple regression analysis.

Lounsbury et al. (2003) measured both job and career satisfaction in an assessment of personality traits and career satisfaction, but utilized one-item generalized measures for each.

The researchers justified the use of global measurements for each satisfaction construct due to empirical evidence suggesting that generalized measures were more valid when compared to multi-faceted measurement. Lounsbury also utilized archived data in the study, therefore, necessitating the use of single-item measure to facilitate the meta-analytic research process. Career satisfaction was measured on a 5-point scale with the following item anchors: “I am fully satisfied with my career today” to “I am not very satisfied with my career to date.”

In an examination of how variation both in family structure and in timing of career entry influenced men's career satisfaction, Osherson and Dill (1983) conducted principal factor analysis on 23 work-satisfaction items adapted from the empirical literature. Four factors represented career satisfaction in this study:

1. The first factor related to perceived fit between career, abilities and interests.
Items included: “I have an opportunity to develop my own special interests and abilities” and “I am given a chance to do the things I do best”.
2. The second factor related to satisfaction with perceived success when compared to peers. Measurement items for this factor included: "I feel successful at work compared to others of my age and background" and "Up to now I've achieved most of my ambitions at work."

The remaining two factors represented feelings of pressure at work and satisfaction with coworkers. However, follow-up interviews with 50 participants and further analysis suggested that the sources of these feelings were adequately captured by the first two factors and therefore, the inferences discussed related to career satisfaction focused on the first two factors (Osherson and Dill, 1983).

Auster and Ekstein's (2005) examination of intrinsic and extrinsic factors related to satisfaction at the mid-career point of professional women engineers utilized self-derived measures of career satisfaction. Responses were gathered by asking how often respondents seriously thought about moving into a career outside of engineering. The researchers justified use of the general measurement because it "captured and isolated career attitudes". Auster and Ekstein (2005) continued to support this measurement stating that other measures often focused on career satisfaction measurement at a point in time, thus making it difficult for respondents to differentiate opinions related to the current job and organization, a key objective of this particular study.

The career satisfaction measures developed by Greenhaus et al. (1990) are common to numerous studies (Armstrong-Stassen & Cameron, 2005; Barnett & Bradley, 2007; Burke, 2001a; Burke 2001b; Burke & MacDermid, 1999; Judge et al., 1995). Greenhaus and colleagues examined relationships among organizational, performance and career factors among black and white managers across various occupations. Career satisfaction was assessed with agreement or disagreement on a 5-point scale with five items developed specifically for this study. Scores of items were averaged to determine the overall degree of career satisfaction. Internal reliability measured by coefficient alpha was reported at 0.88 (Greenhaus et al., 1990). Items included were:

1. "I am satisfied with the success I have achieved in my career"
2. "I am satisfied with the progress I have made toward meeting my overall career goals."
3. "I am satisfied with the progress I have made toward meeting my goals for income."

4. "I am satisfied with the progress I have made toward meeting my goals for advancement."
5. "I am satisfied with the progress I have made toward meeting my goals for the development of new skills."

Intent to Leave Career Measurement

A hypothesis shared with job satisfaction and intent to leave, is the prospect that lack of satisfaction with one's career may or may not cause someone to exodus their career or profession all together. Of important and equal consideration are the possible ramifications of someone becoming or remaining dissatisfied with their career and/or related components, but then also remaining in the profession. The importance of assessing variables related to voluntary career exit are further justified because for many, a career path often brings with it a wealth of emotion and reflection, a progressive list of experiences and abilities, the investment of time, money and often advanced education or credentials.

Research efforts that ascertained intent to leave a career emulated the methods used when assessing intent to leave a job. However, although thoughts of leaving a career behind enter a complex array of variables and considerations, intent to leave a career when included in research models was measured rather simplistically in most studies. Many studies requested that subjects estimate the frequency of thoughts related to leaving their careers with numerically-anchored scales.

Krausz et al. (1995) measured nurses' intention to leave their current job, the organization and the profession with a single item "Do you intend in the near future to . . . change wards, leave the hospital, and leave the profession?" Response choices included "not at

all (1) to definitely yes (5)”. Likewise, Brumels and Beach (2008) utilized a single-item to measure intent to leave among athletic trainers. Respondents rated their thoughts on leaving the profession with the following scale, 1 = never, 2 = seldom, 3 = occasionally, and 4 = frequently. Elevated scores indicated increased consideration for leaving.

Collins et al. (2000) assessed the intent to leave the profession and other satisfaction variables among 452 nurses and 162 allied health professionals. This study utilized two items to measure leave intention: “I would leave my profession if I could” and “I love my profession and would never consider leaving.”

Rittenhouse, Mertz, Keane, and Grumbach (2004) employed a unique approach to determine attrition of physicians from clinical practice. The researchers were also interested in determining predictors of intention to leave and actual departure from clinical practice. Intention to leave clinical practice was assessed by reviewing and comparing the self-reported practice status criteria among 967 physicians for 1998 and three years later in 2001. Data was reviewed from the 1998 and 2001 American Medical Association’s Masterfile.

Continuing with the work of Rittenhouse et al. (2004), “Practice intentions for 2001” were measured by physicians’ responses to the question:

“Three years from now, do you think that you will be:

1. still practicing medicine and seeing patients
2. still working in medicine but no longer seeing patients
3. working in a career other than medicine
4. retired”

Intention to leave was determined by any response other than “still practicing medicine and seeing patients.” Multivariate regression was used to predict both physicians’ intentions to leave

clinical practice and their actual departure. The researchers also calculated specificity, sensitivity, and predictive values of both “intended to leave practice by 2001,” and “left clinical practice” according to the Masterfile criterion “left clinical practice by 2001.” Intent to leave practice by 2001 had a sensitivity of 73.3% and a specificity of 84.4%. The probability that an individual who indicated in 1998 that he or she “intended to leave clinical practice” had actually left practice by 2001 was 35.4%. The probability that an individual who indicated that he or she intended to stay in clinical practice actually remained in 2001 was 96.4%.

Career Satisfaction in Dietetics Practice

While job satisfaction among dietitians has received a limited amount of attention over the last 30 years, even less is known about the satisfaction or dissatisfaction that dietitians have about their careers. Stone, Vaden, and Vaden (1981a) first examined career selection variables and satisfaction among entry-level dietitians. Participants included those born between the years of 1950 and 1955 and resulted in a sample of 395 dietitians. Sixty percent of respondents indicated that the field of dietetics would be chosen again given the opportunity, while 61.8% would encourage relatives to choose the profession. Career selection was most affected by skills and abilities (62.8%), while faculty and academic advisors influenced career selection of 18% of respondents. Other variables associated with career satisfaction were professional and career involvement. The majority (87%) of the sample had attended a state professional meeting and the majority of respondents were members of two or more professional associations.

In related research, Stone, Vaden, and Vaden (1981b) also examined career satisfaction relative to motivation factors among dietitians in their early careers. A high level of professional identification was indicated by those who reported they would defend the profession to others. Dietitians in this phase of the study were also most satisfied in their careers with the opportunity

to use their abilities to serve others. Furthermore, autonomy and task variety were satisfying career motivation variables, while respondents were least satisfied with wage, prestige and promotional opportunities. When assessing predictors for career satisfaction and dissatisfaction, professional identification and psychological success were leading predictors for career satisfaction while education was a negative predictor.

Although not a focused study about career satisfaction among dietitians, Skipper and Lewis (2006) examined registered dietitians with three to eight years of experience, along with employers and educators about advanced practice competencies and professional doctorate degree programs specific to clinical nutrition. Usable responses were gathered from 45% of clinical RDs, 57% of the employers and 67% of educators. Seventy percent of clinicians anticipated increased salary and sense of accomplishment as advantages to an advanced doctorate degree while 68% of the clinicians expected more respect from other healthcare professionals. Fifty eight percent of the clinical practice respondents anticipated career satisfaction, while job opportunities, skills, and a broader career perspective were also noted by over half of the responding clinicians. Fewer respondents anticipated increased respect from other food and nutrition professionals (45%) and increased job responsibility (34%) as a result of a practice doctorate level of education.

Whaley and Hosig (2000) examined 88 male RDs within a 5-state area about the dietetics profession and related satisfiers. Insight about career satisfaction and other variables were gathered using a 4-point Likert-type scale in response to questions about satisfaction with current job and the dietetics profession, choosing the dietetics profession if starting over, and the appeal of professional attributes. Dietitians in the sample had been registered an average of 11.0 ± 8.6 years, 31% had clinical responsibilities, 28% managed foodservices, and 15% did outpatient

counseling. Interestingly, 31% of the men indicated wellness and sports nutrition as their preferred field of practice, but none reported working that field.

According to Whaley and Hosig (2000), 88% of the dietitians were generally satisfied with their current job and 82% with the dietetics profession. However, less than half (48%) of those in management and 35% of those in clinical roles indicated they were mostly satisfied with their current work. Specific attributes about the profession of dietetics were found to be less than desirable. For example, salary was appealing to only 19%, and only about half of those surveyed were satisfied with representation in the profession, prestige, image of dietitians and career advancement opportunities. More appealing attributes included professional challenge (87%), ability to specialize (90%), diversity of practice areas (92%), and the opportunity to help others (98%). Sixty-eight percent of the dietitians planned to remain in the dietetics profession (Whaley & Hosig).

More recent insight about dietitians' career satisfaction was gathered by Sauer, Shanklin, Canter, and Angell (2007). As part of the development of a methodology to examine the career paths of dietitians, Sauer and colleagues utilized a qualitative and quantitative approach to assess perceived career success variables among respondents. Candidates in the study included former presidents of the American Dietetic Association, recipients of esteemed practice awards, and nominees identified by leaders of diverse dietetic practice groups (DPGs). Selection criteria were justified by the need to identify those with established and eventful career paths in order to gather as many inferences about career structures as possible. The result was a cross-sectional sample of 34 practitioners involved with the quantitative survey process and 33 participants in the qualitative portion of the study.

A five-point Likert scale (5=completely agree, 4=somewhat agree, 3=neutral, 2=somewhat disagree, 1=completely disagree) was used to measure career-related variables (Sauer et al., 2007). Dietitians indicated that they strongly believed their career success to date was achieved due to reputation and past performance (4.74 ± 0.51), hard work (4.65 ± 0.49), skills and abilities (4.52 ± 0.63), the network of professional contacts (4.45 ± 0.89) and being in the right place at the right time (4.16 ± 0.93). Dietitians also believed that they were responsible for their own career success (4.61 ± 0.50) and overall, indicated strong satisfaction with career progress (4.42 ± 0.96). Dietitians indicated they would maintain their RD credential if not employed in the field of dietetics (4.26 ± 1.21).

It should be noted that dietitians in this sample were considered leaders in the field with significantly distinguished career paths, and thus the authors theorized that higher reported values of career satisfaction and success among this sample were likely due to the level of achievement and recognition by peers and others. It remains unknown how dietetics practitioners without the same degree of achievement or formal recognition would rate their career success and level of satisfaction. Future implications discussed included the need to gather similar data among specific areas of dietetics practice but also among those at various stages of tenure and levels of achievement, involvement and performance. Further, contributions to the body of research would be strengthened given examination as to whether career satisfaction encourages performance, length of service, professional involvement and achievement or vice-versa.

As is the case with job satisfaction data, the profession of dietetics lacks insight about members' perceived satisfaction with the profession and their careers. What little we do know about the satisfaction dietitians have about their careers is often anecdotal, sometimes

controversial, and many times shared informally through listserv discussions or related venues. As it stands now, the published data that exists about career satisfaction is difficult to generalize among dietitians practicing in today's organizations. As with most fields and professions, it is inaccurate to assume that the constant changes in the economy and work climates have not impacted dietitians' future outlook or past reflections about their careers. Dietitians' satisfaction with their jobs and the relationship to career satisfaction is also of interest to professional leaders and organizations, educators and employers, and therefore heightens the need for examination. How career satisfaction affects the desires to remain in the dietetics profession, to remain within a current job and those related satisfiers, and intent to remain further illustrates this need. Accordingly, observing dissatisfaction among dietitians with little intent to leave current jobs or the profession brings with it intriguing consequences as well.

Relationships between Job Satisfaction and Career Satisfaction

Classical research about job satisfaction has evolved to encompass a broader scope and specific elements about work. More specifically, there is greater attention towards the satisfaction people have about the accumulation of their work over time and the relationship to work currently being done. As pointed out by Brady (1980), career satisfaction is often considered within the context of a job and the level of satisfaction with that job. Therefore, people may determine their career to be in a growth or stagnant phase based on the satisfaction they have with a particular job. Further, people have a tendency to view their job as a function of their career choice, and therefore may deduce favorable or unfavorable attitudes towards the entire career path based on only a few job experiences (Brady, 1980). Brady's work revealed that the greatest variance in career satisfaction among physician's assistants was with the work itself and stated that the more one invests in his or her career in terms of time, money and mental

commitment, the less likely they are to generalize an unfavorable job experience to their overall careers. Brady reiterated the importance of future research that examines the job and career satisfaction relationship among different health occupations.

Career satisfaction and job satisfaction also both relate to happiness with one's experience with work, but contribute to contentment in separate ways. Judge et al. (1995) explained career success in terms of the satisfaction one has with their current job because a career includes and is uniquely impacted by one's current job. However, Judge and colleagues' work involving executives found that the variables which predicted career satisfaction were also different than those that predicted job satisfaction. They further theorized that although career and job satisfaction share relationships, it is the distinct attitudes about each that lead to varied cognitive psychological processes related to each.

Collins et al. (2000) also shared evidence about the unique relationship between job and career satisfaction involving nurses and allied health professionals serving in innovative roles and advanced practice. Enhanced skills and knowledge, working independently and increased managerial duties were reasons that the respondents felt their careers had been enhanced and thus, the same respondents were statistically more likely to have higher job satisfaction. However, one in four practitioners also indicated they would leave the career if they could, which is particularly interesting since participants were senior-level and highly specialized. Lack of career progression and financial rewards, stress and low morale were most often cited in terms of intent to leave (Collins et al., 2000).

Lounsbury et al. (2003) provided considerable evidence about the unique relationships shared between job and career satisfaction across 14 occupational groups. Lounsbury et al. expected a lower correlation between job satisfaction and personality traits than for career

satisfaction because satisfaction with one's job references a shorter amount of time when compared to career satisfaction. Reported data indicated that correlations varied by occupation, with two traits emerging as being significantly related to job and career satisfaction for all 14 occupations. These were emotional resilience and optimism. Work drive was significantly related to job satisfaction among 10 occupational groups and related significantly to career satisfaction among 11 occupations. Lounsbury supported the hypothesis that personality traits represent long-lasting characteristics of individuals over time and accordingly observed higher correlations with personality traits for career satisfaction than for job satisfaction.

Another theoretical link between both career and job satisfaction has been expressed in terms of organizational or professional identity. Mael and Ashforth (1992) defined organizational identification as the relationship an employee perceives between an organization's successes and failures and their own. Mael and Ashforth theorized that satisfaction with work shares a positive relationship with organizational identification and thus, greater identification leads to greater organizational support. Reichers (1985) also suggested that occupational identity often involves a complex array of multiple commitments to various groups both inside and outside of an organization.

Reichers (1985) went on to state that involvement with multiple constituencies may cause conflict with the level of commitment to various groups and/or the organization. Such conflicts may arise from differing goals, expectations or outcomes which may be resolved by the employee in the form of withdrawal. As such, dissatisfaction, withdrawal and related turnover within an organization can be the result of conflict trying to identify with multiple entities rather than lack of overall commitment to them (Reichers, 1985). Related, for the professional, actions

and decisions within the organization may become based more on the desire for professional identity rather than needs expected from the employer and organization or vice-versa.

Lui, Ngo, and Tsang (2001) adapted the work of Mael and Ashforth (1992) related to organizational identity and commitment to examine professional identification within the accounting profession. The established definitions of organizational identification were used to define professional identification as the “level of identification a person has with a particular profession rather than an organization” (Lui et al.). Ashforth and Mael (1989) also defined the phenomena as members’ perception of belonging to a profession or occupation. Lui et al. found support for the hypothesis that commitment with one’s overall profession moderated the relationships between role conflict, job satisfaction and intent to leave.

Professional identification continues to surface in the literature as a unique variable related to both job and career satisfaction. The connection between job and career satisfaction was illustrated by examining predictors of dissatisfaction, professional and organizational identification among nurses (Apker, Ford, & Fox, 2003). The researchers theorized that nurses who exhibited dissatisfaction with their work environment or organization were also strongly influenced to leave the organization; however, remain involved in the nursing profession. Regression analysis identified significant predictors in nurses’ identification with their organization and profession. For example, nurses identified more strongly with their hospital and profession given greater professional autonomy and supportive communication from managers and co-workers. Interestingly, the same nurses identified more strongly with their profession when given opportunities to perform traditional nursing tasks such as bedside care within their current jobs (Apker et al., 2003).

The theoretical basis linking involvement and identity with satisfaction has been described by others (Apker et al., 2003; Lui et al., 2001; Mael & Ashforth, 1992) and is consistent with previous research among dietitians. As discussed previously in the literature review, a few studies have independently assessed job or career satisfaction among dietitians working in various work settings. Upon closer review, professional identity and/or involvement seems to be a common variable among the dietetics-related studies. For example, Mortensen et al. (2002) found that dietitians' involvement with specific facets of the profession such as attendance at professional meetings, holding offices in a professional organizations and being members of ADA and other professional groups were all positively related to job satisfaction. This work suggests that dietitians' job satisfaction may stem from sources outside of the actual employment setting itself, specifically, facets related more specifically to their careers.

Stone, Vaden, & Vaden (1981a) described career satisfaction among entry-level (first 3 years of work) dietitians, in part, through the following measures:

1. *Professional involvement* - number of professional memberships, attendance at professional meetings and frequency of professional reading
2. *Career involvement* - identification with profession, sense of pride related to profession, overall importance of career
3. *Professional identification* - defending the profession when being criticized by others, frequency of telling others about the profession, and likelihood of choosing the same profession again

Overall, entry-level dietitians in this study were proud of their profession, very involved and indicated high levels of self-identity with the profession. Stone et al. (1981a) also recommended that future studies of this nature should include “dietitians at different career

stages and in different practice groups within the profession to gain understanding and provide data for comparison.” However, research stemming from this recommendation remains to be seen 20 years later.

Sauer et al. (2007) also assessed career success and satisfaction by way of career path analysis. But unlike the sample of dietitians at entry-level career status used by Stone et al. (1981a), the sample was comprised of significant contributors to the profession with greater than 25 years of experience. Survey data suggested that perceptions about professional involvement such as maintaining ADA membership, the RD credential, and various career development opportunities were very much related to satisfaction dietitians had with their career choices, paths and successes. Moreover, when assessing themes gathered from personal interviews specifically about careers and professional involvement, there was nearly unanimous agreement that professional involvement also heightened career success and related elements among dietitians.

The unique relationship that may exist between job and career satisfaction is not easily defined given the numerous factors that may or may not relate to each construct in different ways. An examination of the relationship between job and career satisfaction among dietitians relies on both established research and new theoretical assumptions.

It has been demonstrated that professionals can form or modify attitudes about their jobs and careers through a dichotomy of job and career satisfaction. As such, some factors share a common thread to both job and career satisfaction constructs among some occupations. More specifically, professional identity and professional involvement are apparently common to dietitians’ levels of job and career satisfaction. However, only three studies involving dietitians help to illustrate this phenomenon and allow for comparison to previous research involving job

or career satisfaction and professional elements. One study demonstrated that professional involvement was associated specifically to higher job satisfaction among dietitians. Another study, conducted nearly 30 years ago, suggested that dietitians at very early career stages identified with their profession, were involved, and overall felt satisfied with their careers. And finally, more recent research suggested that very distinguished dietitians at much later career stages were also professionally-involved and generally felt satisfied with their career paths and success. What is not within reach is current research among a continuum of dietitians that concurrently involves job and career satisfaction. This type of research would support the greater dietetics and related communities while also advance the growing body of literature about the relationship between job and career satisfaction.

Summary

The review of literature outlined the research associated with the purposes of the study at hand. There are numerous interesting variables related to job satisfaction and career satisfaction, not to mention the possible relationships formed between and within the constructs. Of significant consequence is one's intent to leave a job or career in terms of satisfaction. Also examined through the literature review were methods used to examine satisfaction among dietitians and other occupations. The review of literature has illustrated some of the varied underpinnings of satisfaction among workers and further justifies the need for further study in dietetics practice. The next chapter will outline the methodology used for this dissertation.

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CHAPTER 3 - METHODOLOGY

Introduction

The purpose of this research was to gain insight about the level of job and career satisfaction of dietitians with management responsibilities while contributing to the body of related literature and informing the dietetics profession. More specifically, this dissertation assessed four areas: 1) job and career satisfaction among dietitians, 2) the intent of dietitians to leave their jobs, 3) intent of dietitians to leave the profession, and 4) the relationships between job and career satisfaction and intention to leave among dietitians. The following sections address the research design that achieved the purposes of the research. The sections include a description of the sample, the instrument development and measures used, survey administration and description of statistical analyses.

Population and Sample

The population for this study included 6,060 registered dietitians (RDs) who were members of specific dietetic practice groups (DPGs). DPGs represent members of the American Dietetic Association (ADA) who share similar interests in professional practice areas such as management. There are 29 practice groups with a wide range of specialty in which ADA members may participate (ADA, 2008). For the purpose of this study, three management-related practice groups were identified for sample selection of dietitians with supervisory responsibilities. Table 3.1 illustrates the description and membership of the management-related DPGs used in this study.

The final sample of management dietitians was determined by those respondents who identified themselves as currently employed RDs with supervisory responsibilities on the first question of the survey instrument. If participants selected “no” to the first survey question (were not RDs with supervisory responsibility), the survey ended and proceeded to the “thank you” screen.

Table 3.1: Management-Related Dietetic Practice Groups and 2008-2009 Membership Totals

| Dietetic Practice Group | DPG Membership Description | Membership |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Management in Food and Nutrition Systems | Food and nutrition managers generally employed in institutions, colleges, and universities; includes directors of departments of facilities and administrative dietitians and technicians. | 1,190 |
| School Nutrition Services | School foodservice directors and nutrition educators employed in child nutrition programs, and corporate dietitians working in companies supplying products or services to school foodservice operations. | 1,132 |
| Clinical Nutrition Management | Managers who direct clinical nutrition programs and services. | 2,042 |
| Total | | 4,364 |

Note: Compiled from “2008 – 2009 Dietetic practice groups,” 2008, [Online]. Available at: http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/career_481_ENU_HTML.htm

To enhance the interpretation of results and implications of this study, a non-management-related DPG was also identified and surveyed in order to compare overall measures and relationships of the variables to dietitians not involved with management responsibilities. The Medical Nutrition practice group (MNPG) included 1,696 members who

share interests in providing medical nutrition therapy across a continuum of care. Participants of this group were sent a modified survey instrument that excluded two questions specifically related to management practice; how many years have you had management responsibilities and are you responsible for multiple departments?

Previous research among dietitians has been conducted using DPG membership listings and is summarized in Table 3.2. These studies have utilized a variety of survey distribution methods including manual and online survey methodologies, direct email contact and listserv distribution.

Table 3.2: Previous Research Using Dietetic Practice Groups

| Researchers Topic | DPGs Used | Method Sample Size (Response Rate) |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| | Clinical Nutrition Management | |
| | Diabetes Care and Education | |
| Byham-Gray, Gilbride, Dixon, & Stage (2005) Dietitians' perceptions, attitudes, and knowledge of evidence-based practice | Dietitians in General Clinical Practice Dietitians in Nutrition Support | Survey n=500 (60.6%) |
| | Nutrition Educators of Health | |
| | Professionals, Renal Dietitians, and Research | |
| Green, O'Sullivan Maillet, Touger- Decker, Byham-Gray, & Matheson (2005) Professional practices of registered dietitians | Diabetes Care and Education | Survey attached to membership registration n=1,232 (100%) |

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------|
| Pratt, Kwon, & Rew (2005) Job responsibilities and satisfaction of clinical nutrition managers. | Clinical Nutrition Management | Online Survey n=1,688 (28.7%) |
| Chima & Seher (2007) Nutrition screening practices in acute care settings | Clinical Nutrition Management | Online Survey n=1,569 (16%) |
| Chao, Dwyer, Houser, Tennstedt, & Jacques (2008) Development of a nutrition care checklist for professionals in assisted- living facilities | Gerontological Nutritionists Consulting Dietitians in Health Care Facilities | Online Survey n=5,085 (25%) |

Instrument Development

An online questionnaire using the Axio survey system was used for data collection in this study. The questionnaire was developed after a thorough review of the literature pertaining to the variables of interest and designed with both quantitative and qualitative questions. Appendix B illustrates the five-part instrument for dietitians with management responsibilities. Specific measures are discussed within the next section.

Measures

Job Satisfaction Measurement

Job satisfaction has been assessed using a variety measurement items. The accuracy and justification of using single or multi-item scales are equally described in the literature (Cranny, Smith, & Stone, 1992; Spector, 2000; van Saane, Sluiter, Verbeek, & Frings-Dresen, 2003). Accordingly, the review of literature clearly illustrated a lack of current knowledge, both general and multidimensional, about job satisfaction among dietitians and specifically those in management roles. Moreover, significant changes and demands which could impact satisfaction have occurred and will continue within the profession and within organizations that employ dietitians (Canter & Nettles, 2003; Silverman, Gregoire, Lafferty, & Dowling, 2000). In

addition, dietetics is demographically-unique (Rogers, 2008), there is evidence of perceived pay inequality among dietitians (Barrett & Shanklin, 1996; Dalton, Gilbride, Russo, & Vergis, 1993; Rehn, Stallings, Wolman, & Cullen, 1989) and significant proposed changes to the credentialing and academic preparation for dietitians exists (ADA, 2005; CADE, 2008).

Given the numerous factors affecting today's dietitians and lack of current knowledge about job satisfaction, a multifaceted approach was justified to assess job satisfaction. The multidimensional evaluation provided a more detailed baseline from which to initiate future job satisfaction research across multiple dietetic disciplines. This study utilized Spector's (1985) Job Satisfaction Survey (JSS), (Appendix B).

Spector identified a gap in the literature pertaining to multitrait-multimethod instruments of job satisfaction devoted specifically to those working in the human services sector (Spector, 1985). Thus, the JSS was originally designed from the analysis of pilot data derived from 19 studies involving 3,148 participants including those from the human services, public, and non-profit sectors such as hospitals, nursing homes, and social service agencies. Participants included social workers, nurses, managers and administrators. Spector defined job satisfaction as "a cluster of evaluative feelings about the job" and further categorized the clusters into nine facets of job satisfaction measured by the JSS (Spector, 1985).

1. Pay - amount and fairness or equity of salary
2. Promotion - opportunities and fairness of promotions
3. Supervision - fairness and competence at managerial tasks by one's supervisor
4. Benefits - insurance, vacation, and other fringe benefits
5. Contingent rewards - sense of respect, recognition, and appreciation
6. Operating procedures - policies, procedures, rules, perceived red tape

7. Coworkers - perceived competence and pleasantness of one's colleagues
8. Nature of work - enjoyment of work tasks
9. Communication - sharing of information within the organization

For this study, each of Spector's nine facets of job satisfaction were addressed through four statements parallel to the original six-point Likert scale with the following anchors (1) disagree very much to (6) agree very much. Some items were worded in a positive manner (I like my immediate supervisor) and others in a negative fashion (My immediate supervisor is unfair to me); negative items were reverse-scored for data analysis. Assigning a value of 1 to 6 with four questions per facet of satisfaction leads to a minimum value of 4 (4 x 1) and maximum value of 24 (4 x 6), with a midpoint of 14. Accordingly, composite values below 12 suggest dissatisfaction in a particular facet, and values above 16 indicate satisfaction. To assess overall satisfaction, subscales are combined for a minimum possible score of 36 (36 x 1) and a maximum of 216 (36 x 6), with a midpoint of 126 (see <http://chuma.cas.usf.edu/~spector/scales/jsspag.html>). Overall reliability of the JSS measured by Cronbach's alpha has been observed at .91 (Spector, 1985; van Saane et al., 2003).

Intent to Leave Job

Another variable of this study was job turnover intent and the relationship to job satisfaction. Fishbein and Ajzen (1975) are traditionally credited with the theory that a person's intent to behave a particular way best predicts their actual behavior. Mobley (1977) and Mobley, Horner and Hollingsworth (1978) shared this philosophy and established the cornerstone of research related to leave intentions among workers. They further outlined a sequential cognitive mental process related to intent to leave which includes thoughts about job searching and actual searching, thinking about quitting, and subsequent withdrawal decisions, culminating in actual

departure from the organization. Three items adapted from Mobley et al. (1978) were used to assess job turnover intent for this study (Appendix B). Mobley et al (1978)'s original five-point Likert scale anchored (1) not at all likely to (5) extremely likely was used.

Career Satisfaction

There are only a few studies which indirectly revealed the level of satisfaction dietitians have regarding their careers. Greenhaus, Parasuraman, and Wormley (1990) designed and tested five items to measure career satisfaction which continues to be used extensively across multiple disciplines today. Internal reliability measured by Crohnbach's alpha was reported at 0.88 (Greenhaus et al., 1990). Greenhaus et al.'s five items were used for this study to assess career satisfaction of dietitians (Appendix B) based on agreement or disagreement of statements on a 5-point Likert scale anchored (1) strongly disagree to (5) strongly agree.

Intent to Leave Career

Intent to leave one's career or profession is an important variable as it relates to career satisfaction and the future viability for an established profession. Most studies that included intent to leave a career or profession in the research model(s) requested that subjects estimate the frequency of thoughts related to leaving their careers with numerically-anchored scales (Collins et al., 2000; Krausz et al., 1995; Rittenhouse, Mertz, Keane, & Grumbach, 2004). Therefore, the literature guided the selection of five self-derived items which were used to assess the intention of dietitians to leave the dietetics profession (Appendix B). The Likert scale anchored (1) not at all likely to (5) extremely likely was used and remained consistent to the parameters used for intent to leave job measurement.

Professional Identification and Involvement

Although little is known about dietitians' level of career satisfaction, there is evidence that dietitians have exhibited unique beliefs about their professional identification and belonging, particularly within the context of their work and careers. For example, research conducted nearly 30 years ago by Stone, Vaden, and Vaden (1981a) found that a majority of entry-level dietitians would chose the profession again given the opportunity, and nearly 62% would encourage relatives to choose the profession. Professional and career involvement was also associated with career satisfaction with a majority of respondents belonging to two or more professional associations (Stone et al., 1981a). Professional identification was also a key predictor for career satisfaction among entry-level dietitians (Stone, Vaden, and Vaden, 1981b). Mortensen, Nyland, Fullmer and Eggett (2002) also found a positive relationship between job satisfaction and professional involvement. More recent research found that that dietitians with fully-established career paths associated career success and progress equally to both professional involvement and related factors, and also to personal factors such as hard work and reputation (Sauer, Shanklin, Canter, and Angell, 2007).

Professional involvement and identification seem to play a role in the perceptions dietitians have about their jobs and careers. Therefore, professional identification and related elements were assessed using adaptations from the work of Mael and Ashforth (1992); Stone et al., (1981a); Stone et al., (1981b); and Sauer et al. (2007). More specifically, seven items addressed opinions about the profession such as self-identify with dietetics, well-being, pride, importance and perceived value of maintaining the RD credential (Appendix B). Six additional items assessed respondents' reactions to criticism about the profession, the frequency of discussion about the profession with others, and the likelihood of encouraging others to consider

the dietetics profession. Professional involvement was assessed measuring the number of professional memberships, attendance at dietetics-related meetings and conferences, and elected officer positions held.

Additional Exploratory Measures

To elaborate further on job and career satisfaction and intent to leave variables, an additional section (Appendix B) was added which assessed the degree of positive or negative attitudes towards influential professional factors. Eighteen statements were measured on a 7-point Likert scale anchored from (1) extremely negative to (7) extremely positive. In addition, four open-ended comment questions were included: “*What are the major sources of satisfaction/dissatisfaction that you encounter in your primary job?*” and “*What factors have enhanced/limited satisfaction with your career in dietetics?*”

Demographic Data

Responses to items on the survey were used to describe the characteristics of the sample and to identify relationships between demographic variables and various satisfaction measures (Appendix B). The review of literature also suggested a number of traditional demographic variables that may be associated with satisfaction such as gender, tenure in both jobs and the career, and income, all of which were also gathered in this study. In addition, demographic information attained assisted with categorization of variables specifically related to dietetics practice which may play a role in satisfaction. Included were place of employment, age, level of budget responsibility and number of direct reports, hours worked per week, job classification, and level of education.

Administration

The research protocol was approved by the Kansas State University Institutional Review Board (Appendix C). In addition, permission was granted to conduct research with DPG members by ADA's Practice, Member Interest and Affiliate Relations director per ADA Policy C-17. Following approvals, the survey instrument was pilot tested for a two-week period with three reminders sent to non-respondents. The online survey platform, Axio, was used to administer the pilot survey instrument. A total of 133 subjects and email addresses were selected for the pilot test. A cover letter invited participants to complete the pilot survey, described the purpose and importance of the research and provided instructions for completion (Appendix A). Invitees were also provided a statement of confidentiality and contact information for the primary researchers within the cover letter. The pilot test also requested that participants complete the questionnaire and make additional comments related to overall interpretation of instructions and questions, ease of completion and appropriateness of questions. An invitation to be included in a drawing for a \$50 gift card to a national retailer was included.

Results of the pilot test were used to modify and refine the questionnaire. Overall, 73 dietitians responded to the pilot test for a response rate of 54.9%. Minor modifications were made based on the results. For example, open-ended comments and suggestions indicated that participants were moderately confused with the stem question in the exploratory section regarding attitudes about professional practice factors; *"Please consider the following factors which affect the dietetics profession. Using the following scale, rate the factors on how each impacts the dietetics profession"*. This question was modified for the final survey to read *"Please review the following factors. Using the scale, when you think about your work, how do each of the following make you feel?"* The original 7-point Likert scale was used. Additional

questions sought to determine the number of dietitians that respondents worked with on a routine basis and type of location in which their primary job was located.

The final survey instrument was sent to the email addresses of the target population. Of 6,060 DPG members originally identified, 4,038 were available for the study. The 2,022 members excluded included those without available email addresses, those returned as undeliverable, and those used the pilot study. An overview of the final sample, survey administration method and response rates are displayed in Table 4.1.

Data Analysis

A data file of responses was created using the Statistical Package for the Social Sciences (SPSS) (version 11.5, 2002, SPSS, Inc., Chicago: IL). Descriptive statistics were calculated for demographic, satisfaction, intent to leave, profession identification and other variables. Inferential statistics including correlation analysis, ANOVAs, and regression analysis were performed to assess relationships and to assess the established hypothesis. Cronbach's alpha was used to measure internal consistency of measurement items.

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CHAPTER 4 - JOB SATISFACTION AND INTENT TO LEAVE OF MANAGEMENT DIETITIANS

Abstract

Little is known about the current level of job satisfaction of dietitians, particularly of those with management responsibilities. Furthermore, the roles and responsibilities exhibited by different types of managers in dietetics are quite diverse as illustrated by those managing foodservices, in different environments and/or with clinical oversight.

This study used 36 items from Job Satisfaction Survey (JSS) (Spector, 1985) to examine nine facets of job satisfaction. The results were compared to responses of clinical dietitians and among different types of management RDs. Finally, intent to leave, which has been established as a strong negative correlate of job satisfaction, was also measured.

Mean scores were significantly different ($p \leq 0.05$) for 25 of 36 items between management and non-management dietitians. The mean overall satisfaction score for management dietitians was ($M = 153.75 \pm 26.68$) which was also significantly different than overall satisfaction for non-management dietitians ($M = 140.79 \pm 30.26$, $t = 4.368$, $p < 0.001$). Overall satisfaction scores also differed significantly across seven levels of management job titles, $F(6, 844) = 4.41$, $p < 0.001$. The majority of dietitians in this study did not intend to look for other jobs or leave their jobs in the forthcoming six months. Overall job satisfaction shared a significant negative correlation with intent to leave ($r = -0.477$).

Key Words: Job satisfaction, intent to leave, dietitians

Introduction

The American Dietetic Association stated that the future of the dietetics profession will be impacted by research that examines the attraction, education and retention of competent ADA members and credentialed registered dietitians (ADA, 2007). Employee retention and more specifically, voluntary intent to leave, is one of the strongest correlates with job satisfaction. However, a problem exists in that current insight about the level of job satisfaction among dietitians has not been published in several years. Moreover, the likelihood of dietitians to leave their jobs and whether this has anything to do with various sources of job satisfaction is left to speculation. Another perspective for consideration is if dietitians are significantly dissatisfied with their jobs yet intend to stay. Dissatisfaction may lead to lower productivity or morale for the dietitians themselves or the employees they supervise. Obviously, much is at stake whether dietitians are satisfied or not and/or if they choose to stay or leave their jobs.

A review of job satisfaction of dietitians showed lower satisfaction when compared to other health professionals (Broski & Cook, 1978) and lower overall satisfaction compared to normative values but various levels among different types of dietitians (Agriesti-Johnson & Broski, 1982). Others found higher satisfaction among hospital-based supervisory dietitians as compared to their service employee counterparts (Calbeck, Vaden and Vaden, 1979). Sims and Khan (1986) found moderate levels of job satisfaction among public health nutritionists, with the greatest satisfaction stemming from co-workers and nature of the work.

Rehn, Stallings, Wolman, and Cullen (1989) assessed job satisfaction of dietitians in South Carolina using the Job Description Index (JDI) standardized instrument. Consultants and administrative dietitians were significantly more satisfied with pay than clinical and community dietitians. Community dietitians were significantly more satisfied with supervision than

consultants and administrative dietitians. Dietitians who supervised more than 20 people were significantly more satisfied with pay than those supervising 6 to 20 or no others. Overall, dietitians were most satisfied with their jobs in general and least satisfied with opportunities for promotion.

Another study conducted by Dalton, Gilbride, Russo, and Vergis (1993) used the same instrument (JDI) to examine satisfaction of dietitians in New York City. Results suggested that dietitians were less satisfied specifically with work, pay and promotion. The researchers also found that RDs were significantly more satisfied than non-RDs with respect to work, pay, promotion and the job.

Mortensen, Nyland, Fullmer and Eggett (2002) looked at job satisfaction from a different perspective and examined the relationship between professional involvement and job satisfaction of registered dietitians. Job satisfaction was measured using the Brayfield-Rothe Index of Job Satisfaction and then compared to professional markers. Overall, dietitians reported a high degree of job satisfaction and a positive relationship between job satisfaction and all levels of professional involvement.

Substantial published data about the level of job satisfaction among dietitians is not readily available since 2002. Meanwhile, the employment conditions and environments that surround dietitians and their work have changed dramatically and will continue to do so especially for those in management roles (Jarratt & Mahaffie, 2002; Mathieu, 2008). Both members and leaders of ADA, employers, educators and others gain significantly from knowing the current status of dietitians' job satisfaction. Moreover, an examination of job satisfaction parallel to intent to leave establishes an important baseline from which to compare and build upon in the future.

The objective of this research was to examine job satisfaction of dietitians who have management responsibilities. A secondary outcome included comparisons of the variables to dietitians without supervisory responsibilities. Some dietitians assume management responsibilities for the financial rewards or the opportunity for promotion and new challenges while for others it is a consequence of organizational change or restructuring (Hudson, 2006). Although management dietitians are typically considered within the context of foodservice management, it is important to consider a broader array. For example, clinical nutrition managers, chief clinical dietitians, or patient service managers are responsible for the nutritional care of patients. However, they are also responsible for the leadership and management of clinical teams or other staff, while adhering to regulatory standards, meeting financial demands, and delivering customer satisfaction.

A monumental shift is occurring as the ADA is currently rethinking the configuration and appeal of management practice in dietetics. Accordingly, the ADA House of Delegates suggested that the management in dietetics practice will impact the dietetics profession significantly in the next five to 10 years and has therefore been classified a “mega issue” (as cited in Cluskly, Gerald, & Gregoire, 2007. p. 389). The HOD Leadership Team also recognized that *“strong management and business skills are likely to foster the movement of food and nutrition professionals into positions of greater responsibility, resulting in higher status and salary potential.”* (Cluskly, 2007, p. 389).

Compensation is noted as a common source of job dissatisfaction among dietitians. However, the attainment of increasing supervisory responsibility is also strongly associated with wage gains among dietitians. In fact, those who supervise 100 or more employees have a median salary nearly 50% greater than other RDs (Rogers, 2008). Management of financial resources

also correlates with higher salaries for dietitians. Those responsible for budgets of \$1 million or more earn a median wage approximately 50 times greater than those with no budget responsibility (Rogers, 2008). However, it is not known whether simply earning a higher salary compared to others in the dietetics profession also improves satisfaction with pay. The same can be said for other facets of job satisfaction.

Management dietitians must adapt to swift and significant changes. Silverman, Gregoire, Lafferty, and Dowling (2000) suggested that management dietitians should be prepared to provide appropriate and appealing nutrition services while reducing expenses, reducing staffing, and generating greater revenue. Canter and Nettles (2003) also discussed the trend and prevalence of multi-department responsibilities assigned to directors of food and nutrition services in healthcare environments, typically enacted through organizational restructuring and subsequent efforts at cost control in the healthcare environment. It seems to reason that an assessment of job satisfaction is in order given the trend to assign management dietitians more large-scale responsibilities especially with little opportunity for formal education related to these functions and little to no increase in pay accompanying the additional responsibilities.

The roles and responsibilities exhibited by different types of managers in dietetics are quite diverse, as illustrated by those managing foodservices versus those with clinical oversight. Still yet another group of dietitians with supervisory responsibilities are those who manage both the foodservice and clinical sections within one organization. These individuals may also manage multiple departments. These circumstances may result in varying wants and needs related to job satisfaction.

The purpose of this research was to describe the level of job satisfaction and intent to leave of management dietitians. The intended goal was to help narrow the existing gap in the literature and to inform the dietetics profession and others about this critical topic.

Methodology

Sample

Three management-related dietetic practice groups (DPGs) were used for the population of dietitians with management responsibilities. The DPGs were the Management of Food and Nutrition Systems (MFNS), Clinical Nutrition Management (CNM), and the School Nutrition Services (SNS). Of these DPGs, 3,783 members were available for the final sample of management dietitians. The Medical Nutrition Practice Group (MNPG) was included to represent dietitians without supervisory responsibilities and yielded a sample of 115 members for a total available sample of 4,048 members. The total excluded those used for a pilot test (n=133), those without email addresses, and those with rejected/undeliverable addresses upon delivery.

Data Collection

An online survey was used to gather data. An introductory email invited members to further participate in the study by selecting a survey link or opting out. When selected, the survey link proceeded to a detailed cover letter which further described the purpose, process and importance of the research. Instructions on how to be included in a raffle for a \$50 gift card to a national retail store were also provided in the cover letter.

The availability and sources of contact information determined the methods used to deliver the survey instrument. Survey distribution and follow-up reminders for members of the MFNS and SNS practice groups was conducted with the Axio survey system. Members of the

CNM practice group received the same survey instrument through an email blast sent by the CNM executive chairperson. The MNPG member survey was delivered through an email listserv message sent by the MNGP executive chairperson. The survey process was open for three weeks with follow-up reminders sent approximately every seven days to non-respondents. The research protocol was approved by the Kansas State University Institutional Review Board. Additional approval was gained from ADA's Practice, Member Interest and Affiliate Relations director per ADA Policy C-17.

Instrument Development

The survey instrument was developed after a thorough review of literature pertaining to the objectives of the study. A pilot study was conducted with a random sample of 133 DPG members. The pilot survey instrument included feedback questions and was sent electronically through the Axio survey system to the pilot sample. Feedback was solicited for clarification of the survey process or the instrument. The average completion time of the survey was tracked by Axio and observed to be approximately 20 minutes. The pilot test yielded 73 completed surveys for a response rate of 54.9%. Minor modifications were made based on the results of the pilot test.

Measures

The Job Satisfaction Survey (JSS) developed by Dr. Paul Spector (1985) was used to measure job satisfaction. The JSS utilizes 36 items which represent nine facets: satisfaction with pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of the work, and communication. The original 6-point Likert scale anchored from (1) disagree very much to (6) = agree very much was used. A majority of items were

worded in a positive manner and others in a negative fashion. Negative items were reverse-scored for data analysis as outlined by Spector. Overall reliability of the JSS measured by Cronbach's alpha has been observed at .91 (Spector, 1985). For intent to leave measurement, three items were adapted from Mobley, Horner, and Hollingsworth (1978) using five-point Likert scale anchored from (1) not at all likely to (5) extremely.

Several items on the survey were included to describe the sample and to identify relationships between demographic and/or operational variables and satisfaction measures. These included variables such as age, gender, length of experience, place of employment, job title and annual income.

Data Analysis

A data file of responses was created using the Statistical Package for the Social Sciences (SPSS) (version 11.5, 2002, SPSS, Inc., Chicago: IL). Statistics were calculated for demographic, operational, satisfaction and intent to leave variables. Statistical procedures included correlation analysis, analysis of variance (ANOVA), and independent samples t-tests to assess relationships among the variables. Cronbach's alpha was used to measure internal consistency of measurement items. Significance for statistical tests was set at $p \leq .05$ unless otherwise indicated.

Regression analysis was also used to further explain relationships between job satisfaction and intent to leave. Two regressions were produced to predict intent to leave with the job satisfaction facets as predictor variables. The first multiple regression analysis entered all job satisfaction facets as independent variables and intent to leave as the dependent variable. The second regression was conducted in order to determine if predictability of intent to leave was improved based upon job satisfaction facets across different manager job titles. In this case

of analysis, the seven job titles were dummy-coded with 0 or 1 in order to transform categorical data into that which is appropriate for regression analysis.

Results

Of the 4,038 contacts, a total of 1,307 DPG members responded to the questionnaire yielding a 32.4% response rate (Table 4.1). Excluded from the data tally were incomplete surveys, participants who opted out of the survey process, those who selected “no” to an initial screening question about having supervisory responsibilities or those who did not indicate a job title. The final sample used for data analysis in this report included 966 surveys considered appropriate for data analysis.

Insert Table 4.1

Descriptive characteristics and operational descriptions for management and non-management dietitians were similar and are illustrated in Tables 4.2 and 4.3 respectively. When combined, the overall sample included 966 dietitians, 96.1% were female, 53% had a master’s degree, and only 9% indicated a race other than white. About half (48.9%) of the dietitians were 50 years or older and 41% had 25 years of dietetics-related experience or more. Notable differences between the management and non-management dietitians included lower percentages of non-management dietitians earning \$70,000 or more (0.9% versus 48.5%), working full-time (76.6% versus 96.5%). A greater number of non-management dietitians reported having a supervisor who was an RD compared to management dietitians (54.8% versus 26.2%).

Insert Table 4.2

Insert Table 4.3

The most recent national compensation survey of dietitians (n=11,861) found similar demographic characteristics of dietitians to those of this study. Rogers (2008) reported that 97% of the dietitians were female, 45% had a master's degree, and 10% indicated a race other than white. Also similar to the present study, the median age was 46, 19% were 55 or older and 41% had 20 or more years of dietetics-related experience.

Among participants with management responsibilities, job titles were sorted by 318 (31.9%) clinical nutrition managers or chief clinical dietitians, 287 (28.9%) department or program directors, 61 (6.5%) assistant or associate directors, and 106 (11.2%) managers or assistant managers (Table 4.2). Non-management dietitians were comprised of 115 (12%) clinical dietitians without supervisory responsibility (Table 4.3).

Job Satisfaction

Job satisfaction was measured at the level of the Job Satisfaction Survey (JSS). Reliability estimates were determined by Cronbach's alpha and are provided for the nine satisfaction subscales in Table 4.4. For all satisfaction subscales, reliability was observed at or above that reported by Spector (see <http://chuma.cas.usf.edu/~spector/scales/jsspag.html>). Overall reliability was 0.93 which indicated strong internal consistency and reliability among the job satisfaction items for this study.

Insert Table 4.4

Mean score summaries and comparisons between managers and non-managers for individual job satisfaction items are provided in Table 4.5. Positively worded items with higher mean scores indicate more agreement while lower mean scores on negatively worded items indicate greater disagreement. When reverse-scored and tallied, negatively worded items which are disagreed with translate into satisfaction and vice-versa. Spector advised that mean scores for individual items of three or less indicates dissatisfaction while scores of four or higher generally imply satisfaction (for positively worded items) on the scale anchored (1) very much disagree to (6) agree much agree (see <http://chuma.cas.usf.edu/~spector/scales/jsspag.html>).

Insert Table 4.5

For management dietitians, most items measured neutral to slightly higher than average. Mean scores for managers were generally highest in areas of supervision and coworkers. The lowest mean scores for managers were observed with operating conditions. For example the items “I have too much to do at work” ($M = 2.79 \pm 1.46$) and “I have too much paperwork” ($M = 2.65 \pm 1.37$), after reverse-scoring, indicated that managers originally agreed with these statements (selected higher values) and thus, after reverse-scoring translated into dissatisfaction (lower mean scores).

Among non-managers, the majority of mean scores for individual items were neutral or lower on the scale from 1 to 6. More specifically, questions about raises being too infrequent

were negatively worded and therefore implied dissatisfaction among non-managers ($M = 2.80 \pm 1.58$). In addition, having too much paperwork resulted in a low mean score ($M = 2.71 \pm 1.50$).

Independent samples t-tests were used to determine if significant differences in mean scores of individual items existed between management and non-management dietitians (Table 4.5). Mean scores were significantly different ($p \leq 0.05$) for 25 of 36 items. Non-managers had significantly lower mean scores with all pay-related measurement items. In addition, significant differences between mean scores were found with all four measurement items for promotion, fringe benefits, contingent rewards, and for 3 of 4 items regarding the nature of work.

Both managerial and non-managerial dietitians had higher mean scores related to the level of supervision they experienced. But, there was a significant difference in perceived competence of dietitians' supervisors ($t = 3.982, p < 0.001$) and feelings that supervisors showed interest in the feelings of subordinates ($t = 2.055, p = 0.042$) between managers and non-managers.

When comparing satisfaction scores of individual items related to operating conditions, management dietitians had significantly lower scores regarding having too much to do at work ($t = -2.089, p = 0.038$). Management dietitians had significantly higher mean scores related to satisfaction with coworkers when compared to non-managers ($t = 2.388, p = 0.018$). Finally, communication within the work environment was not exceedingly dissatisfying for either managers or non-managers, but managers had significantly higher mean scores related to not being aware of what was going on with the organization ($t = 2.114, p = 0.036$).

Table 4.6 illustrates composite scores and comparisons for managers and non-managers for the job satisfaction subscales. Composite subscales are the accumulated values for each of the four measurement items per facet. The highest composite subscale score for both

management and non-management dietitians was nature of the work. Other subscales with high ratings for management dietitians included supervision, coworkers and benefits. The lowest composite score for managers was with operating conditions ($M = 12.86 \pm 3.88$). Non-management dietitians' lowest category scores were promotion ($M = 12.11 \pm 4.47$) and pay ($M = 13.40 \pm 5.67$).

Insert Table 4.6

Finally, overall job satisfaction measurement was achieved by summing the composite scores for all facets (Table 4.6). The mean overall satisfaction score for management dietitians was 153.75 ± 26.68 . The mean overall satisfaction score for non-management dietitians was 140.79 ± 30.26 . Overall mean job satisfaction scores for non-management dietitians were significantly less than for managerial dietitians ($t = 4.368, p < 0.001$).

Individual item and composite scores for the different management job titles are provided in Tables 4.7 and 4.8, respectively. One-way ANOVA analysis found that overall satisfaction scores differed significantly across the seven job titles for management dietitians, $F(6, 844) = 4.41, p < 0.001$. Post-hoc assessment showed that clinical nutrition managers had significantly lower overall satisfaction scores compared to district managers and directors. Significant differences for overall satisfaction scores were not found between the remaining types of managers.

Insert Table 4.7

Insert Table 4.8

Additional one-way ANOVA procedures were used to examine differences among satisfaction subscales among different management job titles. Significant differences were not found with the mean scores of satisfaction with supervision, fringe benefits, operating conditions or communication. However, significant differences were found between job titles and satisfaction with pay $F(6, 844) = 3.55, p = 0.002$, promotion $F(6, 844) = 2.80, p = 0.010$, rewards $F(6, 844) = 5.22, p < 0.001$, coworkers $F(6, 844) = 2.97, p = 0.007$, and nature of the work $F(6, 844) = 2.97, p < 0.001$ (Table 4.9).

Insert Table 4.9

More specifically, post-hoc analysis showed that clinical nutrition managers had significantly lower satisfaction scores for pay, contingent rewards and nature of the work with at least one other manager type. For nature of the work, clinical nutrition managers were less satisfied compared to both district managers and directors. Those who had the job title of manager reported significantly lower scores with pay, promotion and nature of the work compared to directors (Table 4.9).

Mean overall job satisfaction scores were also compared across various levels of demographic and operational variables of management dietitians (Table 4.10). Initial one-way ANOVA models indicated significant differences in mean overall satisfaction scores across levels of income $F(6, 825) = 5.16, p < 0.001$, level of budget responsibility $F(6, 836) = 4.81, p < 0.001$, and number of dietitians worked with on a routine basis $F(6, 837) = 3.18, p < 0.001$.

Insert Table 4.10

More specifically, post-hoc analysis showed that overall satisfaction scores were significantly different between the \$70,000/higher income bracket and \$60,000 to \$69,000 level. Dietitians with \$100K to \$499K and no budget responsibility were less satisfied compared to those who were responsible for \$1 million or more. Finally, management dietitians who worked with 3 or fewer dietitians on a routine basis were less satisfied than those who worked with 25 or more dietitians routinely (Table 4.10).

Table 4.11 illustrates the cross-tabulations for job titles by primary place of employment annual income and other management responsibilities. The majority of management dietitians (71.6%) worked in hospitals or medical centers, however, nearly all (94.3%) of the clinical nutrition managers worked in a hospital or medical center. No clinical managers, district managers or general managers earned less than \$40,000, while the majority (66.4%) of clinical managers earned more than \$60,000 per year.

Other characteristics were examined to further illustrate the level of supervisory responsibility for management RDs (Table 4.11). More than half of the clinical nutrition managers (50.0%) and supervisors (54.5%) had no budget responsibility. At the same time, 42% of clinical managers and 45.5% of supervisors reported having nine or fewer employees report directly to them.

Insert Table 4.11

Intent to Leave

Intent to leave was measured with three items on a scale anchored (1) not at all likely to (5) extremely likely. Reliability measured by Cronbach's alpha was negatively influenced by the

first item, “how likely is it you could find a good job if you were to leave your present job?” After deleting this item, reliability for the remaining intent to leave measures was improved significantly to 0.80.

Mean scores for the item, likelihood to look for another job in the next six months, was 2.02 ± 1.28 for management dietitians and 2.09 ± 1.37 for non-management dietitians (Table 4.12). The mean scores for the item, likelihood to quit the job during the next six months, was 1.54 ± 0.94 for management dietitians and 1.57 ± 1.01 for non-management dietitians.

Independent samples t-tests did not indicate significant differences of intent to leave mean scores between managers and non-managers. ANOVA procedures did not indicate significant differences in mean scores of intent to leave across different types of management dietitians.

Insert Table 4.12

Pearson correlations were used to illustrate relationships between job satisfaction subscale scores and overall intent to leave score (Table 4.13). Item scores for the remaining intent to leave measurement items were summed to form an overall intent to leave score for the purpose of correlation analysis. A negative correlation existed between all job satisfaction subscales and intent to leave for both management dietitians and non-managers. For managers, the strongest significant correlations with intent to leave were with contingent rewards ($r = -0.444$), nature of the work ($r = -0.444$), and overall satisfaction ($r = -0.477$). For non-managers, the strongest correlations with intent to leave were with pay ($r = -0.444$), contingent rewards (-0.432), coworkers (-0.462), and overall satisfaction (-0.427). Fringe benefits had a weak and non-significant relationship with intent to leave among non-management dietitians.

Insert Table 4.13

Two regression models, one with all job facets and another with all job facets and job titles were performed. Both were significant, although there were no substantial differences in predicting intent to leave between the two, therefore the original regression model with only job satisfactions facets was used to also illustrate intent to leave for management dietitians.

The regression for management dietitians was significant ($F=35.439, p \leq .001$) (Table 4.14). Significant independent variables in the model were supervision ($\beta=-0.140, p \leq .001$), contingent rewards ($\beta=-0.169, p \leq .002$), and nature of work ($\beta = -0.275, p \leq .001$). The proportion of variance explained from the regression was ($R^2 = 0.28$).

For non-management dietitians, the regression of job facets on intent to leave also produced a significant model ($F=5.996, p \leq .001$) (Table 4.15). Significant variables were different than those expressed for management RDs and included fringe benefits ($\beta = 0.217, p \leq .035$) and coworkers rewards ($\beta=-0.331, p \leq .001$). The proportion of variance explained was ($R^2 = 0.34$).

Insert Table 4.14

Insert Table 4.15

Discussion and Implications

The purpose of this study was to determine the level of job satisfaction among dietitians with management responsibilities. In addition, an assessment as to whether or not management dietitians intended to leave their jobs and the relationship to job satisfaction was determined. Data from non-management dietitians were also gathered for comparison purposes.

Overall Job Satisfaction

Job satisfaction in this study was determined by 36 measurement items categorized into nine subscales: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of the work, and communication. The summation of four specific items resulted in subscale composite scores while overall job satisfaction was determined summing all subscale composite scores. Spector suggested that overall satisfaction scores over 144 generally indicate satisfaction while scores less than 108 imply dissatisfaction (see <http://chuma.cas.usf.edu/~spector/scales/jsspag.html>).

Overall, management dietitians were satisfied with their jobs as measured by the JSS (153.75 ± 26.68) and compared to national normative values across multiple occupations (138 ± 21.6). In contrast, non-management dietitians were neither satisfied nor dissatisfied with their jobs (140.79 ± 30.26). However, total job satisfaction scores between management and non-management dietitians were also significantly different.

Interestingly, when subscales were categorized, the top three subscales of satisfaction for both managers and non-mangers were nature of the work, supervision and coworkers. Both groups of dietitians also ranked the middle quartile with the same three categories (benefits, communication, and rewards) in addition to the same three lower subscales, pay, promotion and

operating conditions. However, the specific rank order and level of satisfaction for each subscale among management and non-management dietitians was meaningfully different for each group.

Another perspective about satisfaction and/or dissatisfaction gained from this research was the frequency of individuals who measured as satisfied or dissatisfied. For management dietitians, 4.7% (40) were dissatisfied, 31.8% (271) were neither satisfied nor dissatisfied and 63.5% (540) were satisfied. The highest overall satisfaction score for managers was 213 cited by one person while the lowest overall satisfaction score was 76 cited by two respondents. For non-management dietitians, 13.0% (15) were dissatisfied, 44.3% (51) were neither satisfied nor dissatisfied, and 42.6% (49) were satisfied. This highest score for non-managers was 206 cited by 4 respondents and the lowest exhibited by one person was 86.

To further define the sources of overall satisfaction, subscale scores were examined more closely. Composite scores below 12 indicated dissatisfaction while scores greater than 16 suggested satisfaction per Spector's guidelines. Generally speaking, management dietitians appeared to be satisfied with most facets of satisfaction except operating conditions. When contrasted against the national composite values, management dietitians were also more satisfied in all facets of job satisfaction except operating conditions (see Table 4.6).

Among job satisfaction facets, non-management dietitians were less satisfied in most areas compared to management dietitians. Moderate levels of satisfaction were observed with supervision, benefits, coworkers, communication, and nature of work but were technically neither satisfied nor dissatisfied with pay, rewards, and operating conditions according to JSS interpretations. Non-managers were least satisfied and nearly dissatisfied with promotion. When compared to composite normative values, non-managers were aligned similarly in most categories except slightly more satisfied with pay, benefits, and communication (see Table 4.6).

Sources of Job Satisfaction and Dissatisfaction

Pay was a greater source of satisfaction for management dietitians compared to non-management RDs who were neither satisfied nor dissatisfied. However, pay was also among the lower ranking subscales for both groups. This is somewhat consistent with previous dietetics-related research where pay was a controversial source of satisfaction or dissatisfaction among dietitians (Rehn et. al, 1989; Sims & Khan, 1986).

The ADA indicated that dietitians with supervisory responsibilities are among the highest paid in the profession (Rogers, 2008), but it was unknown if management dietitians are currently satisfied with their level of compensation. According to this research, dietitians in management roles overall were moderately satisfied with pay (16.25 ± 4.98). District managers, general managers, directors and supervisors were the most satisfied with pay. Specific item scores suggested a common element in regards to lower pay satisfaction among assistant directors, managers and clinical managers was with chances for salary increases.

Generally speaking, as level of pay increased for management dietitians, so did overall satisfaction, which is consistent with some previous research among dietitians (Rehn et. al, 1989). However, the only significant differences in total satisfaction were with those earning \$70,000 (158.39 ± 26.63) compared to those earning just below that level at \$60,000 to \$69,000 (149.48 ± 26.54). More detailed analysis of the pay satisfaction subscale found that those above \$70,000 were significantly more satisfied compared to all other levels of pay above \$29,000.

Nearly all district managers reported incomes greater than \$60,000 (see Table 4.11) and also had the highest level of satisfaction with pay (17.92 ± 3.63). However, it may not be the level of income that explains differences in satisfaction with pay for all management dietitians. For example, clinical nutrition managers were found to be significantly less satisfied with pay as

compared to directors. However, similar numbers of both clinical managers (91.2%) and directors (91.9%) reported incomes greater than \$50,000. Clinical nutrition managers also had significantly lower satisfaction scores with regards to pay as compared to district managers.

A discussion about variances between clinical nutrition managers and other management dietitians is challenging simply because most previous job satisfaction research has failed to specify this role. On occasion, researchers included job titles such as “generalist” or “administrative” dietitian, which may have included clinical managers among others. This research reiterates the need to form a distinction among specific types of management dietitians such as clinical nutrition managers.

Clinical nutrition managers may also have unique reference groups in mind when it comes to satisfaction with pay or other elements of satisfaction for that matter. More specifically, management dietitians are often categorized into one of many roles related to foodservice across a variety of settings, while clinical managers often perform management duties that are very different from those in the hierarchy of providing foodservices.

Approximately 94.3% of the clinical nutrition managers in this study worked in hospitals. Accordingly, the U.S. Department of Labor has indicated that dietitians have median salaries below most other health-related occupations (U.S. DOL, 2008). It is foreseeable that clinical managers compare their level of compensation and thus form their perception of equity to non-RD management professionals in healthcare. These could include those involved in the management of hospital-based clinical teams such as nurses, pharmacists, radiologist and others. On the other hand, it seems logical that other management dietitians without clinical oversight might compare themselves to managers within similar areas of foodservice management. There seem to be grounds for clinical managers to have strong feelings of inequity regarding pay.

For non-managers, satisfaction with pay (13.40 ± 5.67) was also among the lowest scores and significantly lower compared to management dietitians overall. Approximately 48% of non-management dietitians reported annual incomes of \$30,000 to \$49,000. Accordingly, non-managers were significantly less satisfied with all single item measures related to pay which remains consistent with previous research.

Promotion has been dissatisfying for dietitians in previous research. Similarly, satisfaction with promotion was one of the lowest facets scores for management dietitians (14.67 ± 4.65) but still considered satisfying according to the JSS interpretation. District managers were the most satisfied with promotion (17.92 ± 3.63) but clinical managers and managers were significantly less satisfied with promotion compared to district managers. Promotion was the lowest category score for non-managers (12.11 ± 3.63) and considered dissatisfying.

District managers' high level of satisfaction is plausible given that fact that if someone has attained multi-unit or multi-system management status such as a district manager, the chances of being promoted retrospectively are very clear to that person. For other management dietitians, a variety of elements could affect the perceptions of promotability such as size of the facility, the economy, or even internal politics. In addition, the lack of turnover among the existing management team could reduce the chances for promotion and cause dissatisfaction. In other cases, some dietitians at the level of department director may feel that fewer opportunities exist due the specialization of being an RD or that the necessary skill set is deficient in order to promote beyond nutrition services within specific environments such as healthcare or schools.

The current level of operating conditions was considered a possible source of dissatisfaction for most dietitians in this study. Operating conditions refers to satisfaction with policies, procedures, rules, and perceived red tape. Operating conditions was the lowest

composite score for management dietitians and nearly dissatisfying (12.86 ± 3.88). Among specific manager types, assistant directors were considered dissatisfied while general managers, managers, supervisors and clinical nutrition managers scored only slightly above dissatisfaction. When examining the employment settings of assistant directors, 72.1% worked in hospitals and 6.6% worked in college/university settings. Management dietitians who worked in government/military settings had the lowest mean score (10.91 ± 3.79).

Operating conditions were rated slightly higher by non-managers than management dietitians, yet remained one of the lowest subscale scores for non-managers. When comparing individual item scores between managers and non-managers, non-management dietitians had higher scores with having too much to do and too much paperwork compared to managerial dietitians. This may suggest a higher perceived workload along with paperwork among management RDs compared to non-management RDs. Similar to managers, a majority 71.3% of non-managers worked in hospitals, however among all non-managers, those scoring the lowest on satisfaction with operating conditions worked in long-term care facilities (10.13 ± 2.75).

More apparent sources of job satisfaction as measured by the JSS for both management and non-management dietitians included nature of the work, supervision, and coworkers. Management dietitians were also significantly more satisfied with supervision compared to non-managers. In addition, all levels of managers were extremely pleased with supervision. However, at the specific level, significant differences were found between perceived competence of dietitians' supervisors and feelings that supervisors showed interest in the feelings of subordinates between the management dietitians and non-managers.

Another perspective regarding supervision comes from the 55.4% of non-management dietitians who reported having an RD as their immediate supervisor while only 26% of

management dietitians had an RD as his or her supervisor. Among specific management types, assistant directors and supervisors had the highest frequency of supervisors who were RDs, 55.7% and 51.5% respectively, while only 34.6% of clinical managers reported the same. District managers reported the highest satisfaction with supervision but only seven of 26 district managers reported having a supervisor who was an RD.

Dietitians appear to be pleased with the supervision they receive. However, it is not clear if having an RD as a supervisor moderates this. To further elaborate on this, additional independent samples t-tests were conducted for both management and non-management dietitians between those who had an RD supervisor and those who did not. The tests were conducted to examine differences for overall satisfaction and satisfaction with supervision. No significant differences were found in any regard. Thus, there seem to be a complex set of reasons beyond those examined to explain satisfaction with supervision.

Both management and non-management dietitians were exceedingly satisfied with their coworkers. Given that satisfaction with supervision was rated high among the majority of dietitians in this study, it is possible that dietitians were thinking of their supervisor as a coworker, especially if both in the relationship were RDs. Those classified as managers were significantly more satisfied with coworkers than directors. Interestingly, management dietitians who worked with more than 25 dietitians on a regular basis had significantly higher levels of overall satisfaction compared to those who worked with less than three dietitians.

Satisfaction with nature of work assessed pride and enjoyment with regards to the job. This category was the greatest source of satisfaction both managers and non-managers with overall scores indicating strong satisfaction (20.04 ± 3.44 , 18.42 ± 4.04). Management dietitians were also significantly more satisfied with nature of the work compared to non-managers.

Among manager types, clinical nutrition managers were significantly less satisfied than district managers and directors, while managers were also significantly less satisfied compared to directors. For both management dietitians and non-managers, having a sense of pride was the strongest element of satisfaction with nature of the work.

One element that likely affects satisfaction with nature of work is the workplace setting. Among management dietitians, those working in other healthcare facilities were the most satisfied with nature of work (21.58 ± 2.81) while those with the lowest scores worked in government/military facilities (19.61 ± 2.98), but still showed strong satisfaction. Inversely, non-managers with the highest subscale score worked in government/military settings while those with the lowest composite score worked in long-term care facilities (15.63 ± 2.93). Variance analysis procedures did not indicate significant differences with level of satisfaction by place of employment.

Although not a specific facet of the JSS, certain operational factors such as level of budget authority and number of employees supervised are theoretically aligned with nature of the work. One study indicated that satisfaction with pay increased for dietitians as the number of employees they supervised increased (Rehn, et. al, 1989). Rogers (2008) also stated that as supervisory and budget responsibility increased, median pay for dietitians did as well. No significant differences for overall satisfaction were found across number of employees supervised. However, those who managed a budget greater than \$1million were significantly more satisfied compared to those who managed \$100K to \$499K and no budget responsibility (see Table 4.10). Results also indicated that approximately 51% of clinical nutrition managers had no budget authority, which is similar to previous findings discussed by Witte and

Messersmith (1995). In contrast, only 62 (7.3%) of all other management dietitians in this research reported no budget authority.

Finally, communication, benefits and contingent rewards were satisfying elements for both management and non-management dietitians, but to varying degrees. Fringe benefits and rewards were significantly different for the two groups while communication was similarly measured. Satisfaction with contingent rewards was measured at the level of recognition, respect and appreciation. Clinical managers were significantly less satisfied compared to district managers and directors. Clinical managers also rated contingent rewards the lowest among all types of managers (15.48 ± 2.93) but not as low as non-managers (13.91 ± 5.17). Once again, it could be theorized that clinical nutrition managers share feelings of being misunderstood or underrepresented in this regard.

Intent to Leave

Due to the current global economic recession and historic unemployment rates across many occupations, caution is necessary with regards to the measurement and discussion of intent to leave. Accordingly, dietitians are not immune to the effects of the recession both personally and at work. This existing reality limits the interpretation of intent to leave at this time. At the same time, there is also no current baseline from which to compare intent to leave among dietitians and the numerous variables that may or may not have contributed to the phenomena within dietetics profession.

The majority of dietitians in this study did not intend to look for other jobs or leave their jobs in the forthcoming six months. When controlled for respondents considering retirement, 133 (15.6%) management dietitians indicated that it was likely or extremely likely they would look for another job in the next six months. Also, for management dietitians, 42 (5.0%)

indicated it was likely or extremely likely they would quit their current job in the next six months. Of course, the causes precipitating dietitians in quitting their jobs could be numerous and/or due to reasons that have little to do with job satisfaction. These could include relocation, workplace restructuring, child rearing, return to school or a change in career just to name a few.

Overall, the results of this study are consistent with the literature among other occupations; as satisfaction among dietitians increased, the less likely it appeared that voluntary leave would occur. Correlation analyses support this assertion in that for both management and non-management dietitians in this study, overall satisfaction had a strong significant negative relationship with intent to leave. More specifically, only 23 of the management dietitians were considered dissatisfied for overall job satisfaction also indicated that it was likely or very likely they would look for another job in the next six months. Comparatively, only 7 of the management dietitians who were dissatisfied also indicated that it was likely or extremely likely they would actually quit their current jobs.

For non-management dietitians, 21 (18.3%) indicated that it was likely or extremely likely they would look for another job in the next six months and 7 (6.1%) indicated it was likely or extremely likely they would quit their current job in the next six months. For those who were dissatisfied, only four also indicated that it was likely or very likely they would look for another job in the next six months. Comparatively, only two of the non-managers who were dissatisfied indicated that it was likely or extremely likely they would actually quit their current job.

Conclusions

This research was about determining the current status and sources of job satisfaction among dietitians serving in supervisory capacities. Dietitians without supervisory responsibilities were included to illustrate differences with managers in dietetics practice.

Previous research has examined job satisfaction among a wide variety of dietitians and when summarized, usually described dissatisfaction in terms of pay and promotion (Agreisti-Johnson & Miles, 1982; Dalton, Gilbride, Russo, & Vergis, 1993; Rehn et al., 1989). In the same studies, moderate to high levels of satisfaction have been expressed with regards to supervision and the work itself.

Among 966 dietitians who were members of selected dietetics practice groups, overall job satisfaction was observed. Generally, management dietitians were more satisfied compared to national indices while non-management dietitians had neutral to moderate levels of satisfaction and were aligned closely with national norms. However, when narrowed down to those involved in this study, levels of satisfaction were significantly different between management and non-management RDs and specific types of management RDs.

This study defined job satisfaction through nine facets. Operating conditions was the least satisfying category of job satisfaction for dietitians in management roles while promotion was the least satisfying for non-managers. Nature of the work was the most satisfying source of satisfaction among all types of management dietitians and for non-managers alike. Levels of total satisfaction were significantly different for managers in different roles based on income level, budget responsibility and dietitians in the workplace. The need for additional study is particularly evident, but especially among clinical nutrition managers, who were not classified as dissatisfied, but expressed significantly lower satisfaction in a variety of areas when compared to other managers.

This research illustrated that significant opportunities exist at many levels for dietitians. Nature of the work itself was a strong source of satisfaction for the majority of dietitians in this study, making it clear the need for a new baseline of knowledge that illustrates which elements

of the work of dietitians are particularly satisfying or dissatisfying and why. Furthermore, the generous number of dietitians who fell into the neutral category for satisfaction in different areas reinforces the reason to continue research in this area. Future work should focus on the underlying factors that may cause these practitioners to sway one way or the other in regards to being more satisfied. All of the aforementioned factors should be shared and discussed among the members of the profession, in particular among educators and those trying to support, motivate and/or manage other dietitians.

Non-managers for the most part were displeased with promotion and pay. Unfortunately, this is not new information for the profession. The findings of this research also indicate that we need to know more about the reasons non-management RDs may or may not have any interest with “management” responsibilities. This research suggests that management dietitians are more satisfied than their non-management counterparts, yet non-managers fail to sense opportunities for promotion or as much satisfaction with pay. This is particularly intriguing since management dietitians rated only one category, operating conditions, lower than non-managers, but not significantly. It is equally important to question the appeal, opportunity and/or lack of availability regarding management roles for non-managers. It is possible that attaining a management position of any kind in dietetics practice is not considered a promotion for non-managers.

Finally, this study sought to determine if dietitians intend to leave their current jobs, which was not the case for the majority. Further, many elements of job satisfaction had significantly negative relationships with intent to leave, yet predicting intent to leave is left with unanswered questions. Since dietitians intend to stay in their jobs, the next logical step would be to elaborate upon elements that are satisfying while also developing methods to improve the less

than desirable traits of work for dietetics professionals.

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Table 4.1: Total Responses and Survey Distribution Methods

| Practice Group | Total Members | Total Available Sample | Total Responses | Distribution Method |
|------------------------------------------|----------------------|-------------------------------|------------------------|----------------------------|
| Management in Food and Nutrition Systems | 1,190 | 976 ^a | 406 (41.6%) | Axio Distribution |
| School Nutrition Services | 1,132 | 1,032 ^a | 181 (17.5%) | Axio Distribution |
| Clinical Nutrition Management | 2,042 | 2,007 | 613 (30.5%) | E-mail blast |
| Total - Management | 4,364 | 3,783^b | 1,200 (31.6%) | |
| Medical Nutrition | 1,696 | 255 | 107 (41.9%) | Listserv |
| Total Responses | | 4,038 | 1,307(32.4%) | |

^aExcludes pilot study participants and those without directory email addresses

^bExcludes rejected/undeliverable addresses

Table 4.2: Characteristics of Management Dietitians (N=851)

| Characteristic | n | %^a | Characteristic | n | %^a |
|--------------------------|----------|----------------------|----------------------------------------|----------|----------------------|
| Age | | | Route to registration | | |
| 20 – 29 years | 46 | 5.4 | Post-baccalaureate dietetic internship | 445 | 52.3 |
| 30 – 39 years | 176 | 20.7 | Coordinated program in dietetics | 195 | 22.9 |
| 40 – 49 years | 191 | 22.4 | Master’s degree plus experience | 132 | 15.5 |
| 50 – 59 years | 368 | 43.2 | Traineeship | 60 | 7.1 |
| 60 years or older | 62 | 7.3 | Other | 15 | 1.8 |
| Gender | | | Ethnicity | | |
| Female | 816 | 95.9 | Caucasian | 764 | 89.8 |
| Male | 34 | 4.0 | Asian/Pacific Islander | 34 | 4.0 |
| Education | | | Hispanic | 16 | 1.9 |
| Baccalaureate degree | 203 | 23.9 | African-American | 15 | 1.8 |
| Some graduate coursework | 179 | 21.0 | Other | 13 | 1.5 |
| Master’s degree | 449 | 52.8 | Native American | 1 | 0.1 |
| Doctoral degree | 19 | 2.2 | Relationship status | | |
| Annual Income | | | Married | 601 | 70.6 |
| under \$19,000 | 2 | 0.2 | Single | 116 | 13.6 |
| \$20,000 - \$29,000 | 2 | 0.2 | Divorced | 87 | 10.2 |
| \$30,000 - \$39,000 | 12 | 1.4 | Widowed | 19 | 2.2 |
| \$40,000 - \$49,000 | 53 | 6.2 | Living with partner | 17 | 2.0 |
| \$50,000 - \$59,000 | 145 | 17.0 | | | |
| \$60,000 - \$69,000 | 205 | 24.1 | | | |
| \$70,000 or greater | 413 | 48.5 | | | |

^aResponses may not equal 100% due to non-response to a question.

Table 4.2: Characteristics of Management Dietitians (N=851) (Cont.)

| Characteristic | n | %^a | Characteristic | n | %^a |
|------------------------------------------------------|----------|----------------------|-----------------------------------------------|----------|----------------------|
| <i>Years of dietetics-related experience</i> | | | <i>Primary place of employment</i> | | |
| 3 or less | 14 | 1.6 | Hospital or Medical Center | 609 | 71.6 |
| 3 – 10 years | 123 | 14.5 | K-12 School | 103 | 12.1 |
| 11 – 15 years | 124 | 14.6 | Long-term care facility | 50 | 5.9 |
| 16 – 25 years | 221 | 26.0 | Government or Military | 23 | 2.7 |
| 25 years or more | 364 | 42.8 | Other | 20 | 2.4 |
| <i>Years in present job</i> | | | College or University | 18 | 2.1 |
| 3 or less | 203 | 23.9 | Other medical facility | 12 | 1.4 |
| 3 – 10 years | 329 | 38.7 | Commercial or Industry | 8 | 0.9 |
| 11 – 15 years | 114 | 13.4 | <i>Employer type</i> | | |
| 16 – 25 years | 130 | 15.3 | Self-operated organization | 598 | 70.3 |
| 25 years or more | 67 | 7.9 | Contract management company | 225 | 26.4 |
| <i>Have worked continuously</i> | | | Self-employed | 6 | 0.7 |
| Yes | 747 | 87.9 | <i>Employment status</i> | | |
| No | 98 | 11.5 | Full-time | 821 | 96.5 |
| <i>Have worked outside of dietetics</i> | | | Part-time | 16 | 1.9 |
| Yes | 142 | 16.7 | <i>Number of hours worked per week</i> | | |
| No | 691 | 81.2 | 19 hours or less | 4 | 0.5 |
| <i>Years with management responsibilities</i> | | | 20 – 39 hours | 8 | 0.9 |
| 3 or less | 122 | 14.3 | 40 - 49 hours | 416 | 48.9 |
| 4 – 10 years | 241 | 28.3 | 50 or more hours | 380 | 44.7 |
| 11 – 15 years | 96 | 11.3 | <i>Plan to retire within 3 years</i> | | |
| 16 – 25 years | 219 | 25.7 | Yes | 33 | 3.9 |
| 26 years or more | 137 | 16.1 | No | 727 | 85.4 |
| | | | Maybe | 80 | 9.4 |

^aResponses may not equal 100% due to non-response to a question.

Table 4.2: Characteristics of Management Dietitians (N=851) (Cont.)

| Characteristic | n | %^a | Characteristic | n | %^a |
|---------------------------------------|----------|----------------------|-------------------------------------------------|----------|----------------------|
| <i>Job title</i> | | | <i>Level of budget responsibility</i> | | |
| Clinical nutrition manager | 318 | 37.4 | No budget responsibility | 224 | 26.3 |
| Department/Program Director | 287 | 33.7 | \$1K - \$99K | 99 | 11.6 |
| Manager | 106 | 12.5 | \$100K - \$499K | 133 | 15.6 |
| Assistant/Associate Director | 61 | 7.2 | \$500K - \$999K | 97 | 11.4 |
| Supervisor/Coordinator | 33 | 3.9 | \$1 million or greater | 288 | 33.8 |
| District/Division/Regional manager | 26 | 3.1 | <i>Number of employees supervised</i> | | |
| General/Multi-site/Multi-unit manager | 20 | 2.4 | No employees | 7 | 0.8 |
| <i>Employment setting</i> | | | 1 – 9 employees | 266 | 31.3 |
| Rural | 52 | 6.1 | 10 – 19 employees | 213 | 25.0 |
| Suburban | 237 | 27.8 | 20 – 29 employees | 111 | 13.0 |
| Small metropolitan | 221 | 26.0 | 30 to 39 employees | 95 | 11.2 |
| Medium metropolitan | 149 | 17.5 | 40 or more employees | 150 | 17.6 |
| Large metropolitan | 175 | 20.6 | <i>Number of RDs routinely work with</i> | | |
| <i>Primary supervisor RD</i> | | | No dietitians | 126 | 14.8 |
| No | 223 | 26.2 | 1 – 3 dietitians | 225 | 26.6 |
| Yes | 595 | 69.6 | 4 – 10 dietitians | 285 | 33.5 |
| | | | 11 – 15 dietitians | 105 | 12.3 |
| | | | 16 – 25 dietitians | 58 | 6.8 |
| | | | 25 or more dietitians | 43 | 5.1 |

^aResponses may not equal 100% due to non-response to a question.

Table 4.3: Characteristics of Non-Management Dietitians (N=115)

| Characteristic | n | %^a | Characteristic | n | %^a |
|--------------------------|----------|----------------------|----------------------------------------|----------|----------------------|
| Age | | | Route to registration | | |
| 20 – 29 years | 12 | 10.4 | Post-baccalaureate dietetic internship | 62 | 53.9 |
| 30 – 39 years | 30 | 26.1 | Coordinated program in dietetics | 22 | 19.1 |
| 40 – 49 years | 26 | 22.6 | Master’s degree plus experience | 15 | 13.0 |
| 50 – 59 years | 34 | 29.6 | Traineeship | 60 | 5.2 |
| 60 years or older | 9 | 7.8 | Other | 95 | 7.8 |
| Gender | | | Ethnicity | | |
| Female | 112 | 97.4 | Caucasian | 107 | 93.0 |
| Male | 3 | 2.6 | Asian/Pacific Islander | 6 | 5.2 |
| Education | | | Relationship status | | |
| Baccalaureate degree | 31 | 27.0 | Married | 82 | 71.3 |
| Some graduate coursework | 18 | 15.7 | Single | 16 | 13.9 |
| Master’s degree | 64 | 55.7 | Divorced | 12 | 10.4 |
| Doctoral degree | 29 | 1.7 | Widowed | 2 | 1.7 |
| Annual Income | | | Living with partner | 1 | 0.9 |
| under \$19,000 | 4 | 3.5 | | | |
| \$20,000 - \$29,000 | 7 | 6.1 | | | |
| \$30,000 - \$39,000 | 18 | 15.7 | | | |
| \$40,000 - \$49,000 | 34 | 29.6 | | | |
| \$50,000 - \$59,000 | 27 | 23.5 | | | |
| \$60,000 - \$69,000 | 18 | 16.5 | | | |
| \$70,000 or greater | 1 | 0.9 | | | |

^aResponses may not equal 100% due to non-response to a question.

Table 4.3: Characteristics of Non-Management Dietitians (N=115) (Cont.)

| Characteristic | n | %^a | Characteristic | n | %^a |
|-----------------------------------------------------|----------|----------------------|-----------------------------------------------|----------|----------------------|
| <i>Years of dietetics-related experience</i> | | | <i>Employer type</i> | | |
| 3 or less | 9 | 7.8 | Self-operated organization | 91 | 79.1 |
| 3 – 10 years | 25 | 21.7 | Contract management company | 16 | 13.9 |
| 11 – 15 years | 18 | 15.7 | Self-employed | 3 | 2.6 |
| 16 – 25 years | 23 | 20.0 | <i>Employment status</i> | | |
| 25 years or more | 38 | 33.0 | Full-time | 88 | 76.5 |
| <i>Years in present job</i> | | | Part-time | 22 | 19.1 |
| 3 or less | 35 | 30.4 | <i>Number of hours worked per week</i> | | |
| 3 – 10 years | 36 | 31.3 | 19 hours or less | 9 | 7.8 |
| 11 – 15 years | 18 | 15.7 | 20 – 39 hours | 27 | 23.5 |
| 16 – 25 years | 10 | 8.7 | 40 - 49 hours | 68 | 59.1 |
| 25 years or more | 14 | 12.2 | 50 or more hours | 9 | 7.8 |
| <i>Have worked continuously</i> | | | <i>Plan to retire within 3 years</i> | | |
| Yes | 102 | 88.7 | Yes | 43 | 3.5 |
| No | 11 | 9.6 | No | 100 | 87.0 |
| <i>Have worked outside of dietetics</i> | | | Maybe | 70 | 6.1 |
| Yes | 20 | 17.4 | <i>Employment setting</i> | | |
| No | 93 | 80.9 | Rural | 12 | 10.4 |
| <i>Primary place of employment</i> | | | Suburban | 35 | 30.4 |
| Hospital or Medical Center | 82 | 71.3 | Small metropolitan | 30 | 26.1 |
| Other medical facility | 14 | 12.3 | Medium metropolitan | 19 | 16.5 |
| Long-term care facility | 8 | 7.0 | Large metropolitan | 17 | 14.8 |
| Other | 5 | 4.3 | | | |
| Government or Military | 4 | 3.5 | | | |

^aResponses may not equal 100% due to non-response to a question.

Table 4.3: Characteristics of Non-Management Dietitians (N=115) (Cont.)

| Characteristic | n | %^a |
|-------------------------------------------------|----------|----------------------|
| <i>Primary supervisor RD</i> | | |
| No | 63 | 54.8 |
| Yes | 46 | 40.0 |
| <i>Number of RDs routinely work with</i> | | |
| No dietitians | 27 | 23.5 |
| 1 – 3 dietitians | 45 | 39.1 |
| 4 – 10 dietitians | 35 | 30.4 |
| 11 – 15 dietitians | 65 | 5.2 |

^aResponses may not equal 100% due to non-response to a question.

Table 4.4: Reliability of Job Satisfaction Measures (N=966)

| Factors | Reliability | Reliability^a |
|----------------------|--------------------|--------------------------------|
| Pay | 0.83 | 0.75 |
| Promotion | 0.79 | 0.73 |
| Supervision | 0.84 | 0.82 |
| Fringe Benefits | 0.78 | 0.73 |
| Contingent Rewards | 0.83 | 0.76 |
| Operating Conditions | 0.62 | 0.62 |
| Coworkers | 0.68 | 0.60 |
| Nature of the Work | 0.79 | 0.78 |
| Communication | 0.73 | 0.71 |
| Overall Satisfaction | 0.93 | 0.91 |

^aSpector (see <http://chuma.cas.usf.edu/~spector/scales/jssovr.html>)

Table 4.5: Comparison of Job Satisfaction Measures between Management and Non-Management Dietitians

| Factor (Items) | Mean ± Standard Deviation | | t | Sig. |
|-------------------------------------------------------------------------------|---------------------------|-------------------------|-------|--------|
| | Managers (n=851) | Non-Managers (n=115) | | |
| Pay | | | | |
| I feel I am being paid a fair amount for the work I do. | 4.37±1.45 | 3.80±1.69 | 3.485 | 0.001* |
| I feel unappreciated by the organization when I think about what they pay me. | 4.32±1.55 | 3.73±1.73 | 3.471 | 0.001* |
| I feel satisfied with my chances for salary increases. | 3.97±1.51 | 3.19±1.69 | 4.725 | 0.000* |
| Raises are too few and far between. | 3.58±1.68 | 2.80±1.58 | 4.927 | 0.000* |
| Promotion | | | | |
| People get ahead as fast here as they do in other places. | 3.88±1.32 | 3.45±1.42 | 3.057 | 0.001* |
| I am satisfied with my chances for promotion. | 3.81±1.53 | 3.13±1.52 | 4.474 | 0.000* |
| Those who do well on the job stand a fair chance of being promoted. | 3.80±1.43 | 3.22±1.41 | 4.137 | 0.000* |
| There is too little chance for promotion in my job. | 3.18±1.67 | 2.57±1.41 | 4.077 | 0.000* |
| Supervision | | | | |
| My supervisor is unfair to me. | 5.10±1.36 | 4.98±1.29 | 0.900 | 0.370 |
| I like my supervisor. | 5.03±1.19 | 4.85±1.11 | 1.593 | 0.113 |
| My supervisor is competent in doing his/her job. | 4.76±1.36 | 4.19±1.45 | 3.982 | 0.000* |
| My supervisor shows too little interest in the feelings of subordinates. | 4.54±1.57 | 4.23±1.50 | 2.055 | 0.042 |

Scale values range from Very Much Disagree (1) to Agree Very Much (6).

*p ≤ 0.05

Table 4.5: Comparison of Job Satisfaction Measures between Management and Non-Management Dietitians (Cont.)

| Factor (Items) | Mean ± Standard Deviation | | t | Sig. |
|-------------------------------------------------------------------------------|---------------------------|-------------------------|--------|--------|
| | Managers (n=851) | Non-Managers (n=115) | | |
| Fringe Benefits | | | | |
| The benefits we receive are as good as most other organizations offer. | 4.91±1.18 | 4.51±1.44 | 2.828 | 0.005* |
| The benefit package we have is equitable. | 4.83±1.18 | 4.26±1.38 | 4.206 | 0.000* |
| I am not satisfied with the benefits I receive. | 4.45±1.58 | 4.07±1.70 | 2.263 | 0.025* |
| There are benefits we do not have which we should have. | 4.02±1.50 | 3.67±1.58 | 2.228 | 0.027* |
| Contingent Rewards | | | | |
| I do not feel that the work I do is appreciated | 4.28±1.53 | 3.85±1.47 | 2.945 | 0.004* |
| When I do a good job, I receive the recognition for it that I should receive. | 4.20±1.43 | 3.76±1.48 | 2.995 | 0.003* |
| There are few rewards for those that work here. | 4.18±1.47 | 3.34±1.49 | 5.651 | 0.000* |
| I don't feel my efforts are rewarded the way they should be. | 3.73±1.59 | 3.10±1.70 | 3.734 | 0.000* |
| Operating Conditions | | | | |
| Many of our rules and procedures make doing a good job difficult. | 3.79±1.52 | 3.77±1.45 | 0.194 | 0.846 |
| My efforts to do a good job are seldom blocked by red tape. | 3.63±1.41 | 3.82±1.32 | -1.381 | 0.169 |
| I have too much to do at work. | 2.79±1.46 | 3.09±1.45 | -2.089 | 0.038* |
| I have too much paperwork. | 2.65±1.37 | 2.71±1.50 | -0.429 | 0.668 |

Scale values range from Very Much Disagree (1) to Agree Very Much (6).

* $p \leq 0.05$

Table 4.5: Comparison of Job Satisfaction Measures between Management and Non-Management Dietitians (Cont.)

| Factor (Items) | Mean ± Standard Deviation | | t | Sig. |
|-------------------------------------------------------------------------------------------|---------------------------|-----------------------------|--------|--------|
| | Managers (n=851) | Non- Managers (n=115) | | |
| Coworkers | | | | |
| I like the people I work with. | 5.27±0.87 | 5.21±0.74 | 0.879 | 0.381 |
| I enjoy my coworkers. | 5.21±0.92 | 4.99±0.94 | 2.388 | 0.018* |
| There is too much bickering and fighting at work. | 4.13±1.50 | 4.03±1.62 | 0.601 | 0.549 |
| I find I have to work harder at my job because of the incompetence of people I work with. | 3.98±1.54 | 3.94±1.57 | 0.270 | 0.788 |
| Nature of the Work | | | | |
| I feel a sense of pride in doing my job. | 5.31±0.88 | 4.97±1.10 | 3.195 | 0.002* |
| I like doing the things I do at work. | 5.06±0.97 | 4.84±1.12 | 1.985 | 0.049* |
| My job is enjoyable. | 4.93±1.04 | 4.70±1.09 | 2.143 | 0.034* |
| I sometimes feel my job is meaningless. | 4.75±1.45 | 4.09±1.65 | 4.084 | 0.000* |
| Communication | | | | |
| The goals of this organization are not clear to me. | 4.94±1.32 | 4.66±1.46 | 1.959 | 0.052 |
| Work assignments are not fully explained. | 4.33±1.44 | 4.52±1.40 | -1.395 | 0.165 |
| I often feel that I do not know what is going on with the organization. | 4.21±1.45 | 3.91±1.41 | 2.114 | 0.036* |
| Communications seem good within this organization. | 3.84±1.40 | 3.86±1.42 | -0.155 | 0.877 |

Scale values range from Very Much Disagree (1) to Agree Very Much (6).

*p ≤ 0.05

Table 4.6: Comparison of Job Satisfaction Subscales between Management and Non-Management Dietitians

| Subscale | Mean ± Standard Deviation | | t | Sig. | Mean ± SD ^a |
|-----------------------------|-------------------------------|-----------------------------------|--------------|--------------|------------------------|
| | Management Dietitians (n=851) | Non-Management Dietitians (n=115) | | | |
| Pay | 16.25±4.98 | 13.40±5.67 | 5.122 | 0.000* | 12.3±2.4 |
| Promotion | 14.67±4.65 | 12.11±4.47 | 5.721 | 0.000* | 12.1±1.8 |
| Supervision | 19.43±4.54 | 18.01±4.58 | 3.123 | 0.002* | 18.8±1.7 |
| Fringe Benefits | 18.20±4.25 | 16.50±4.96 | 3.516 | 0.001* | 14.6±2.1 |
| Contingent Rewards | 16.39±4.88 | 13.91±5.17 | 4.845 | 0.000* | 13.8±1.8 |
| Operating Conditions | 12.86±3.88 | 13.37±4.32 | -1.202 | 0.231 | 13.5±2.0 |
| Coworkers | 18.60±3.55 | 18.14±3.90 | 1.204 | 0.230 | 17.9±1.4 |
| Nature of Work | 20.04±3.44 | 18.42±4.04 | 4.112 | 0.000* | 18.9±1.8 |
| Communication | 17.32±4.19 | 16.93±4.35 | 0.898 | 0.371 | 14.5±1.9 |
| Overall Satisfaction | 153.75±26.68 | 140.79±30.26 | 4.368 | 0.000 | 138±21.6 |

^a JSS Standardized Observations (see <http://chuma.cas.usf.edu/~spector/scales/jssnormstotal.html>)

*p ≤ 0.05

Table 4.7: Comparison of Job Satisfaction Measures of Management Dietitians (n=851)

| | Mean ± Standard Deviation | | | | | | |
|-------------------------------------------------------------------------------|-------------------------------|------------------------------|---------------------|---------------------------------|--------------------|--------------------------------|----------------------|
| | District Manager (n=26) | General Manager (n=20) | Director (n=287) | Assistant Director (n=61) | Manager (n=106) | Clinical Manager (n=318) | Supervisor (n=33) |
| Pay | | | | | | | |
| I feel unappreciated by the organization when I think about what they pay me. | 5.04±1.08 | 4.50±1.82 | 4.52±1.59 | 4.34±1.55 | 4.16±1.51 | 4.11±1.52 | 4.39±1.56 |
| I feel I am being paid a fair amount for the work I do. | 4.77±1.39 | 4.55±1.23 | 4.62±1.49 | 4.41±1.48 | 4.23±1.41 | 4.16±1.41 | 4.36±1.39 |
| I feel satisfied with my chances for salary increases. | 4.42±1.39 | 3.70±1.78 | 4.15±1.56 | 3.85±1.44 | 3.88±1.51 | 3.86±1.44 | 3.91±1.68 |
| Raises are too few and far between. | 3.39±1.78 | 3.35±2.03 | 3.90±1.73 | 3.10±1.70 | 3.25±1.64 | 3.50±1.57 | 3.58±1.75 |
| Promotion | | | | | | | |
| Those who do well on the job stand a fair chance of being promoted. | 4.69±1.23 | 3.70±1.59 | 3.90±1.43 | 3.98±1.37 | 3.66±1.47 | 3.69±1.41 | 3.48±1.46 |
| People get ahead as fast here as they do in other places. | 4.58±1.27 | 3.90±1.41 | 3.92±1.33 | 3.89±1.46 | 3.74±1.24 | 3.86±1.30 | 3.58±1.42 |
| I am satisfied with my chances for promotion. | 4.35±1.44 | 3.80±1.61 | 4.00±1.56 | 3.92±1.49 | 3.45±1.46 | 3.68±1.52 | 3.88±1.45 |
| There is too little chance for promotion in my job. | 3.77±1.58 | 3.30±1.95 | 3.18±1.75 | 3.54±1.63 | 3.06±1.61 | 3.10±1.61 | 3.21±1.47 |
| Supervision | | | | | | | |
| I like my supervisor. | 5.54±1.03 | 5.10±1.17 | 5.16±1.08 | 4.75±1.33 | 5.02±1.16 | 4.97±1.23 | 4.55±1.48 |
| My supervisor is unfair to me. | 5.08±1.70 | 5.20±1.20 | 5.16±1.35 | 5.00±1.30 | 5.09±1.38 | 5.09±1.34 | 4.85±1.46 |
| My supervisor is competent in doing his/her job. | 5.00±1.30 | 4.80±1.28 | 4.95±1.25 | 4.56±1.35 | 4.63±1.53 | 4.68±1.36 | 4.36±1.64 |
| My supervisor shows too little interest in the feelings of subordinates. | 4.92±1.83 | 4.80±1.44 | 4.66±1.48 | 4.54±1.51 | 4.52±1.56 | 4.42±1.65 | 4.33±1.63 |

Scale values range from Very Much Disagree (1) to Agree Very Much (6).

Table 4.7: Comparison of Job Satisfaction Measures of Management Dietitians (n=851) (Cont.)

| | Mean ± Standard Deviation | | | | | | |
|-------------------------------------------------------------------------------|-------------------------------|------------------------------|---------------------|---------------------------------|--------------------|--------------------------------|----------------------|
| | District Manager (n=26) | General Manager (n=20) | Director (n=287) | Assistant Director (n=61) | Manager (n=106) | Clinical Manager (n=318) | Supervisor (n=33) |
| Fringe Benefits | | | | | | | |
| The benefit package we have is equitable. | 5.27±0.78 | 4.95±1.23 | 4.90±1.23 | 4.89±1.16 | 4.79±1.20 | 4.71±1.18 | 4.94±0.93 |
| The benefits we receive are as good as most other organizations offer. | 5.15±1.08 | 4.70±1.34 | 4.99±1.20 | 4.93±1.15 | 4.82±1.17 | 4.85±1.18 | 4.94±1.12 |
| I am not satisfied with the benefits I receive. | 4.85±1.29 | 4.20±1.91 | 4.49±1.66 | 4.72±1.45 | 4.53±1.57 | 4.32±1.54 | 4.30±1.57 |
| There are benefits we do not have which we should have. | 4.65±1.38 | 4.10±1.65 | 4.13±1.57 | 4.03±1.30 | 4.01±1.52 | 3.86±1.44 | 4.00±1.54 |
| Contingent Rewards | | | | | | | |
| I do not feel that the work I do is appreciated | 5.00±0.94 | 4.55±1.28 | 4.54±1.48 | 4.10±1.57 | 4.25±1.60 | 4.01±1.55 | 4.39±1.41 |
| There are few rewards for those that work here. | 4.77±1.21 | 4.05±1.54 | 4.46±1.44 | 3.98±1.60 | 4.07±1.46 | 3.94±1.44 | 4.30±1.43 |
| When I do a good job, I receive the recognition for it that I should receive. | 4.62±1.27 | 4.40±1.64 | 4.31±1.42 | 4.03±1.46 | 4.28±1.45 | 4.04±1.42 | 4.30±1.33 |
| I don't feel my efforts are rewarded the way they should be. | 4.35±1.44 | 3.45±1.61 | 4.05±1.61 | 3.48±1.50 | 3.57±1.68 | 3.49±1.51 | 3.94±1.69 |
| Operating Conditions | | | | | | | |
| Many of our rules and procedures make doing a good job difficult. | 4.12±1.31 | 3.40±1.70 | 3.76±1.61 | 3.74±1.72 | 3.78±1.45 | 3.86±1.43 | 3.52±1.40 |
| My efforts to do a good job are seldom blocked by red tape. | 3.65±1.47 | 3.75±1.45 | 3.72±1.41 | 3.38±1.49 | 3.75±1.42 | 3.56±1.41 | 3.55±1.20 |
| I have too much to do at work. | 2.96±1.69 | 2.85±1.73 | 2.90±1.50 | 2.43±1.34 | 2.70±1.49 | 2.77±1.39 | 2.70±1.47 |
| I have too much paperwork. | 2.81±1.52 | 2.35±1.50 | 2.69±1.42 | 2.33±1.08 | 2.70±1.35 | 2.63±1.33 | 2.97±1.61 |

Scale values range from Very Much Disagree (1) to Agree Very Much (6).

Table 4.7: Comparison of Job Satisfaction Measures of Management Dietitians (n=851) (Cont.)

| | Mean ± Standard Deviation | | | | | | |
|-------------------------------------------------------------------------------------------|-------------------------------|------------------------------|---------------------|---------------------------------|--------------------|--------------------------------|----------------------|
| | District Manager (n=26) | General Manager (n=20) | Director (n=287) | Assistant Director (n=61) | Manager (n=106) | Clinical Manager (n=318) | Supervisor (n=33) |
| Coworkers | | | | | | | |
| I enjoy my coworkers. | 5.62±0.57 | 5.10±1.02 | 5.34±0.84 | 5.20±0.89 | 5.08±0.96 | 5.15±0.96 | 4.97±1.05 |
| I like the people I work with. | 5.38±1.27 | 5.30±0.92 | 5.38±0.84 | 5.18±0.74 | 5.19±0.91 | 5.23±0.85 | 5.12±0.89 |
| There is too much bickering and fighting at work. | 4.65±1.38 | 4.40±1.73 | 4.26±1.44 | 3.92±1.52 | 3.93±1.55 | 4.08±1.50 | 3.94±1.66 |
| I find I have to work harder at my job because of the incompetence of people I work with. | 3.96±1.48 | 3.55±1.67 | 4.17±1.48 | 3.52±1.57 | 3.75±1.61 | 4.03±1.54 | 3.76±1.54 |
| Nature of the Work | | | | | | | |
| I feel a sense of pride in doing my job. | 5.58±0.64 | 5.45±0.83 | 5.46±0.76 | 5.13±0.92 | 5.25±0.84 | 5.18±0.99 | 4.97±1.16 |
| My job is enjoyable. | 5.46±0.65 | 5.00±0.73 | 5.11±0.94 | 4.90±1.06 | 4.75±1.12 | 4.78±1.12 | 5.18±0.92 |
| I like doing the things I do at work. | 5.38±0.64 | 5.35±0.75 | 5.20±0.93 | 5.02±0.83 | 4.96±1.02 | 4.92±1.02 | 5.33±0.78 |
| I sometimes feel my job is meaningless. | 5.27±1.25 | 5.00±1.62 | 5.01±1.41 | 4.66±1.37 | 4.60±1.50 | 4.49±1.47 | 4.91±0.84 |
| Communication | | | | | | | |
| The goals of this organization are not clear to me. | 4.96±1.34 | 4.55±1.36 | 5.06±1.30 | 4.85±1.45 | 4.78±1.40 | 4.95±1.28 | 4.73±1.35 |
| Work assignments are not fully explained. | 4.62±1.63 | 4.15±1.57 | 4.51±1.41 | 4.05±1.45 | 4.19±1.49 | 4.27±1.38 | 4.09±1.63 |
| I often feel that I do not know what is going on with the organization. | 4.12±1.51 | 3.95±1.50 | 4.30±1.47 | 4.25±1.34 | 4.25±1.52 | 4.11±1.42 | 4.39±1.46 |
| Communications seem good within this organization. | 4.08±1.13 | 3.65±1.39 | 4.00±1.30 | 3.82±1.42 | 3.81±1.50 | 3.75±1.44 | 3.30±1.51 |

Scale values range from Very Much Disagree (1) to Agree Very Much (6).

Table 4.8: Comparison of Job Satisfaction Subscales of Management Dietitians

| Subscale | Mean ± Standard Deviation | | | | | | |
|-----------------|-------------------------------|------------------------------|---------------------|---------------------------------|---------------------|--------------------------------|----------------------|
| | District Manager (n=26) | General Manager (n=20) | Director (n=287) | Assistant Director (n=61) | Manager (n=106) | Clinical Manager (n=318) | Supervisor (n=33) |
| Pay | 17.92±3.63 | 16.10±5.79 | 17.18±5.27 | 15.70±5.02 | 15.52±4.86 | 15.63±4.63 | 16.24±5.27 |
| Promotion | 17.38±4.33 | 14.70±5.78 | 14.99±4.77 | 15.33±4.56 | 13.87±4.53 | 14.34±4.49 | 14.15±4.45 |
| Supervision | 20.54±4.73 | 19.90±4.09 | 19.93±4.20 | 18.85±4.56 | 19.26±4.72 | 19.16±4.67 | 18.09±5.34 |
| Fringe Benefits | 19.92±3.61 | 17.95±4.75 | 18.52±4.49 | 18.57±3.99 | 18.15±4.34 | 17.74±4.08 | 18.18±4.22 |
| Rewards | 18.73±3.83 | 16.45±4.88 | 17.35±4.94 | 15.59±4.90 | 16.17±4.89 | 15.48±4.70 | 16.94±4.83 |
| Conditions | 13.54±3.70 | 12.35±5.00 | 13.08±4.19 | 11.87±3.51 | 12.93±3.82 | 12.83±3.61 | 12.73±3.90 |
| Coworkers | 19.62±3.40 | 18.35±3.36 | 19.15±3.26 | 17.82±3.46 | 17.96±3.87 | 18.48±3.65 | 17.79±3.66 |
| Nature of Work | 21.69±2.02 | 20.80±4.48 | 20.79±3.12 | 19.70±3.28 | 19.58±3.46 | 19.37±3.76 | 20.39±2.79 |
| Communication | 17.77±3.72 | 16.30±4.32 | 17.87±4.10 | 16.97±3.85 | 17.04±4.65 | 17.08±4.08 | 16.52±4.94 |
| Overall | 167.12±19.66 | 152.90±28.52 | 158.85±27.46 | 150.41±24.74 | 150.48±27.99 | 150.11±25.12 | 151.03±28.86 |

Table 4.9: ANOVA Post-Hoc Comparisons of Job Satisfaction Subscales and Overall Satisfaction between Management Dietitians

| Subscale | Mean ± Standard Deviation | | | | <i>F</i> ^a value | <i>P</i> value |
|----------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|--------------------------------|-------------------|
| | District Manager (n=26) | Director (n=287) | Manager (n=106) | Clinical Manager (n=318) | | |
| Pay | 17.92±3.63 ^{xy} | 17.18±5.27 ^x | 15.52±4.86 ^y | 15.63±4.63 ^y | 3.547 | 0.002 |
| Promotion | 17.38±4.33 ^x | 14.99±4.77 ^{xy} | 13.87±4.53 ^y | 14.34±4.49 ^y | 2.804 | 0.010 |
| Rewards | 18.73±3.83 ^x | 17.35±4.94 ^x | 16.17±4.89 ^{xy} | 15.48±4.70 ^y | 5.218 | 0.000 |
| Coworkers | 19.62±3.40 ^x | 19.15±3.26 ^x | 17.96±3.87 ^y | 18.48±3.65 ^{xy} | 2.967 | 0.007 |
| Nature of Work | 21.69±2.02 ^x | 20.79±3.12 ^x | 19.58±3.46 ^{xy} | 19.37±3.76 ^y | 6.140 | 0.000 |
| Overall | 167.12±19.66^x | 158.85±27.46^x | 150.48±27.99^{xy} | 150.11±25.12^y | 4.410 | 0.000 |

Note: Means with different superscripts (x, y, z) differ significantly by Tukey's Post-Hoc test, ($p \leq 0.05$).

^a Results from ANOVA test

Table 4.10: ANOVA Post-Hoc Comparisons of Overall Satisfaction between Demographic Variables for Management Dietitians

| Mean ± Standard Deviation | | | | | | |
|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Income Level | | | | | | |
| < \$19K | \$20K - \$29K | \$30K - \$39K | \$40K - \$49K | \$50K - \$59K | \$60K - \$69K | > \$70K |
| 188.00 ± 14.14 ^x | 129.00 ± 46.67 ^x | 140.75 ± 22.53 ^x | 147.81 ± 28.18 ^x | 150.99 ± 23.35 ^x | 149.48 ± 26.54 ^y | 158.39 ± 26.63 ^x |
| Number of Dietitians Work With | | | | | | |
| None | 1 - 3 | 4 - 10 | 11 - 15 | 16 - 25 | > 25 | |
| 149.38 ± 28.49 ^y | 151.48 ± 27.21 ^y | 156.35 ± 25.42 ^x | 152.47 ± 26.55 ^x | 156.93 ± 24.01 ^x | 164.40 ± 24.82 ^x | |
| Level of Budget Responsibility | | | | | | |
| No Budget | | \$1K - \$99K | \$100K - \$499K | \$500K - \$999K | > 1M | |
| 149.18 ± 26.29 ^y | | 153.25 ± 28.63 ^z | 150.74 ± 25.28 ^y | 155.80 ± 24.74 ^x | 158.71 ± 26.61 ^x | |

Note: Means with different superscripts (x, y, z) differ significantly by Tukey's Post-Hoc test, ($p \leq 0.05$).

Table 4.11: Working Descriptions of Management Dietitians (n=851)

| | District Manager (n=26) | General Manager (n=20) | Director (n=287) | Assistant Director (n=61) | Manager (n=106) | Clinical Manager (n=318) | Supervisor (n=33) |
|-------------------------------------------|----------------------------------------|---------------------------------------|-----------------------------|------------------------------------------|----------------------------|-----------------------------------------|------------------------------|
| <i>Primary place of employment</i> | | | | | | | |
| Hospital or Medical Center | 6 (23.1) | 14 (70.0) | 167 (58.2) | 44 (72.1) | 66 (62.3) | 300 (94.3) | 12 (36.4) |
| K-12 School | 4 (15.4) | 2 (10.0) | 65 (22.6) | 4 (6.6) | 12 (11.3) | - | 16 (48.5) |
| Long-term care facility | 6 (23.1) | 1 (5.0) | 22 (7.7) | 4 (6.6) | 5 (4.7) | 10 (3.1) | 2 (6.1) |
| Government or Military | - | - | 9 (3.1) | 1 (1.6) | - | 4 (1.3) | 3 (9.1) |
| Other | 4 (15.4) | 2 (10.0) | 6 (2.1) | 1 (1.6) | 5 (4.7) | 2 (0.6) | - |
| College or University | - | - | 8 (2.8) | 6 (6.6) | 4 (3.8) | - | - |
| Other medical facility | 3 (11.5) | 1 (5.0) | 5 (1.7) | 1 (1.6) | 1 (0.9) | 1 (0.3) | - |
| Commercial or Industry | 3 (11.5) | - | 3 (1.0) | - | 2 (1.9) | - | - |
| <i>Annual Income</i> | | | | | | | |
| under \$19,000 | - | - | - | - | 2 (1.9) | - | - |
| \$20,000 - \$29,000 | - | - | - | - | 2 (1.9) | - | - |
| \$30,000 - \$39,000 | - | - | 8 (2.8) | 1 (1.6) | 1 (0.9) | - | 11 (33.3) |
| \$40,000 - \$49,000 | - | - | 11 (3.8) | 1 (1.6) | 16 (15.1) | 18 (5.7) | 7 (21.2) |
| \$50,000 - \$59,000 | 2 (7.7) | 2 (10.0) | 31 (10.8) | 7 (11.5) | 20 (18.9) | 79 (24.8) | 4 (12.1) |
| \$60,000 - \$69,000 | 2 (7.7) | 1 (5.0) | 40 (13.9) | 14 (23.0) | 26 (24.5) | 111 (35.0) | 11 (33.3) |
| \$70,000 or greater | 22 (84.6) | 17 (85.0) | 193 (67.2) | 37 (60.7) | 36 (34.0) | 100 (31.4) | 8 (24.2) |

Responses may not equal 100% due to non-response to a question.

Table 4.11: Working Descriptions of Management Dietitians (n=851) Cont.

| | District Manager (n=26) | General Manager (n=20) | Director (n=287) | Assistant Director (n=61) | Manager (n=106) | Clinical Manager (n=318) | Supervisor (n=33) |
|---------------------------------------|----------------------------------------|---------------------------------------|-----------------------------|------------------------------------------|----------------------------|-----------------------------------------|------------------------------|
| <i>Level of budget responsibility</i> | | | | | | | |
| No budget responsibility | - | - | 11 (3.8) | 9 (14.8) | 24 (22.6) | 162 (50.9) | 18 (54.5) |
| \$1K - \$99K | 5 (19.2) | - | 19 (6.6) | 9 (14.8) | 16 (15.1) | 44 (13.8) | 6 (18.1) |
| \$100K - \$499K | 5 (19.2) | 4 (20.0) | 40 (13.9) | 12 (19.7) | 16 (15.1) | 53 (16.7) | 3 (9.0) |
| \$500K - \$999K | 2 (7.7) | 2 (10.0) | 46 (16.0) | 4 (6.6) | 16 (15.1) | 25 (7.9) | 3 (9.0) |
| \$1 million or greater | 13 (50.0) | 13 (65.0) | 169 (58.9) | 27 (44.3) | 31 (29.2) | 29 (9.1) | 6 (18.1) |
| <i>Number of employees supervised</i> | | | | | | | |
| No employees | - | - | - | - | 2 (1.9) | 13 (4.1) | 2 (6.1) |
| 1 – 9 employees | 8 (30.8) | 4 (20.0) | 61 (21.3) | 17 (27.9) | 32 (30.2) | 121 (38.1) | 13 (39.4) |
| 10 – 19 employees | 6 (23.1) | 4 (20.0) | 50 (17.4) | 14 (23.0) | 14 (13.2) | 120 (37.7) | 5 (15.2) |
| 20 – 29 employees | 2 (7.7) | - | 40 (13.9) | 6 (9.84) | 14 (13.2) | 42 (13.2) | 7 (21.2) |
| 30 to 39 employees | - | 5 (25.0) | 42 (14.6) | 12 (19.7) | 17 (16.0) | 18 (5.7) | 1 (3.0) |
| 40 or more employees | 3 (11.5) | 7 (35.0) | 89 (31.0) | 12 (19.7) | 22 (20.8) | 10 (3.1) | 7 (21.2) |

Responses may not equal 100% due to non-response to a question.

Table 4.12: Comparison of Intent to Leave Job Measures between Management and Non-Management Dietitians

| | Mean ± Standard Deviation | | t | Sig. |
|---------------------------------------------------------------------------------|---------------------------|-------------------------|--------|-------|
| | Managers (n=851) | Non-Managers (n=115) | | |
| How likely is it that you will look for another job during the next six months? | 2.02±1.28 | 2.09±1.37 | -0.470 | 0.639 |
| How likely is it that you will quit your job during the next six months? | 1.54±0.94 | 1.57±1.01 | -0.247 | 0.805 |

Scale values range from Not at all likely (1) to Extremely likely (5).

*p ≤ 0.05

Table 4.13: Pearson Correlation Comparisons between Job Satisfaction Facets and Intent to Leave of Management and Non-Management Dietitians

| Subscales | Correlation (r), p-value | | | |
|----------------------|--------------------------|---------|-------------------------|---------|
| | Managers (n=851) | | Non-managers (n=115) | |
| Pay | -0.302 | 0.000** | -0.444 | 0.000** |
| Promotion | -0.261 | 0.000** | -0.250 | 0.007** |
| Supervision | -0.377 | 0.000** | -0.219 | 0.019* |
| Fringe Benefits | -0.228 | 0.000** | -0.126 | 0.180 |
| Contingent Rewards | -0.444 | 0.000** | -0.432 | 0.000** |
| Operating Conditions | -0.237 | 0.000** | -0.223 | 0.016* |
| Coworkers | -0.334 | 0.000** | -0.462 | 0.000** |
| Nature of the Work | -0.444 | 0.000** | -0.338 | 0.000** |
| Communication | -0.364 | 0.000** | -0.298 | 0.001** |
| Overall Satisfaction | -0.477 | 0.000** | -0.427 | 0.000** |

**p ≤ 0.01

*p ≤ 0.05

Table 4.14: The Regression of Job Satisfaction Facets on Intent to Leave for Management Dietitians

| | Model | Sum of Squares | df | Mean Square | F | Significance |
|---|--------------|-----------------------|-----------|--------------------|----------|---------------------|
| 1 | Regression | 973.082 | 9 | 108.120 | 35.439 | .000 |
| | Residual | 2559.670 | 839 | 3.051 | | |
| | Total | 3532.751 | 848 | | | |

| Standardized Coefficients | | | | |
|----------------------------------|----------------------|-------------|----------|-------------|
| | Model | Beta | t | Sig. |
| 1 | (Constant) | | 22.047 | .000 |
| | Pay | -.015 | -.378 | .706 |
| | Promotion | .041 | 1.110 | .267 |
| | Supervision | -.140 | -3.534 | .000 |
| | Fringe Benefits | -.050 | -1.469 | .142 |
| | Contingent Rewards | -.169 | -3.131 | .002 |
| | Operating Conditions | -.011 | -.333 | .739 |
| | Coworkers | .001 | .027 | .979 |
| | Nature of Work | -.275 | -7.302 | .000 |
| | Communication | -.049 | -1.181 | .238 |

Table 4.15: The Regression of Job Satisfaction Facets on Intent to Leave for Non-Management Dietitians

| | Model | Sum of Squares | df | Mean Square | F | Significance |
|---|--------------|-----------------------|-----------|--------------------|----------|---------------------|
| 1 | Regression | 196.239 | 9 | 21.804 | 5.996 | .000 |
| | Residual | 381.847 | 105 | 3.637 | | |
| | Total | 578.087 | 114 | | | |

| Standardized Coefficients | | | | |
|----------------------------------|----------------------|-------------|----------|-------------|
| | Model | Beta | t | Sig. |
| 1 | (Constant) | | 7.114 | .000 |
| | Pay | -.253 | -1.855 | .066 |
| | Promotion | .028 | .270 | .787 |
| | Supervision | .028 | .268 | .789 |
| | Fringe Benefits | .217 | 2.137 | .035 |
| | Contingent Rewards | -.242 | -1.343 | .182 |
| | Operating Conditions | .091 | .846 | .400 |
| | Coworkers | -.331 | -3.313 | .001 |
| | Nature of Work | -.137 | -1.312 | .192 |
| | Communication | .053 | .418 | .677 |

CHAPTER 5 - CAREER SATISFACTION AND INTENT TO LEAVE OF MANAGEMENT DIETITIANS

Abstract

Dietitians put forth a significant investment in terms of their academic preparation, maintenance of often multiple professional credentials, and life-long learning. What is not clear is whether management dietitians are satisfied with their careers.

The purpose of this research was to describe the level of career satisfaction of management dietitians. The results were compared to responses of clinical dietitians and among different types of management RDs. Finally, intent to leave the profession was assessed and measured as a correlate to overall career satisfaction.

Overall, management dietitians were satisfied with their careers (19.82 ± 3.73). In contrast, non-management dietitians were closer to neutral and significantly less satisfied with their careers (16.44 ± 5.06 , $t = 6.907$, $p < 0.001$). Overall career satisfaction scores also differed significantly across seven job titles of management, $F(6, 839) = 5.69$, $p < 0.001$. Intent to leave the profession was not observed for the majority of dietitians in this study.

Key Words: Career satisfaction, intent to leave, dietitians

Introduction

When someone decides to enter the dietetics profession and become a registered dietitian, it soon becomes clear that the journey will include pursuing a rigorous academic agenda, proving one's competence through demonstration and examination, contemplating diverse practice and employment options, and assuming continuous learning and education. Maintaining registered status requires professional commitment and investment both initially and throughout various career stages.

For the majority of registered dietitians, the professional dietetics journey unfolds with a career related to providing medical or related nutritional care to others. For others, their interests and skill sets may take a different turn into a career in managing services, products, people, and financial resources in large or small scale operations. Still yet, some dietitians provide both medical nutritional care and management functions at the same time.

Unfortunately, we know very little about the level of satisfaction dietitians have when they consider the experiences they have accumulated during their dietetics careers. However, the literature sheds some light on the topic. Stone, Vaden, and Vaden (1981a) examined career selection variables and satisfaction among new dietitians. Of 395 entry-level dietitians surveyed, 60% percent indicated that they would choose the field of dietetics again given the opportunity and 61.8% would encourage relatives to choose dietetics as a profession. Being involved in professional organizations and attending dietetics-related meetings were also associated with career satisfaction.

Stone, Vaden, and Vaden (1981b) also examined career satisfaction relative to motivation factors among dietitians in their early careers. A high level of professional identification was

indicated by those who reported they would defend the profession to others. Dietitians in their early career stages were most satisfied with the opportunity to use their abilities to serve others.

A recent compensation survey indicated that about 3% of registered dietitians are male (Rogers, 2008). Whaley and Hosig (2000) questioned 88 male registered dietitians about the dietetics profession generally found men satisfied. However, specific attributes about the profession found to be less than desirable included salary, representation in the profession, prestige, image and career advancement opportunities. More appealing attributes included professional challenge, ability to specialize, diversity of practice areas, and the opportunity to help others. Only 68% of the male dietitians planned to remain in the dietetics profession.

Other insight about dietitians' career satisfaction was gathered by Sauer, Shanklin, Canter, and Angell (2007). As part of the development of a methodology to examine the career paths of dietitians, Sauer and colleagues utilized a qualitative and quantitative approach to assess perceived career success variables among a cross-sectional sample of experienced dietitians who had received professional recognition for their career accomplishments. Dietitians indicated that they strongly believed their career success was achieved due to reputation and past performance, hard work, skills and abilities, their network of professional contacts and being in the right place at the right time. Dietitians also reported that they were responsible for their own career success and overall indicated strong satisfaction with career progress. Dietitians indicated they would maintain their RD credential even if not employed in the field of dietetics.

Beyond these published articles, there is a lack of research about the level of satisfaction with the profession and careers of dietitians. Opinions often surface about the profession and career obstacles through informal channels such as listserv discussions or related venues. The existing published data about career satisfaction is difficult to generalize among dietitians

practicing in today's organizations. As with most fields and professions, it would seem very naïve to assume that constant changes in the economy and work climates have not impacted dietitians' future outlook or past reflections about their careers or the profession.

Dietitians' satisfaction with their career and profession should be of interest to professional leaders and related organizations, educators and employers, and therefore heightens the need for examination. Dietitians who are dissatisfied with the profession yet have no intent to leave also brings troublesome consequences as well.

A recent report stated that management dietitians earn higher incomes compared to others in the profession (Rogers, 2008). As the level management responsibilities increase, higher incomes usually follow (Rogers). Dissatisfaction with pay has been established in the dietetics literature for a number of years across a variety of dietetics roles and positions. However, the extent that income or other variables define satisfaction with a career in dietetics, particularly among the various sublevels of management dietitians, is limited.

The ADA also prescribed that the future of the profession will be influenced by research that examines the attraction, education and retention of competent ADA members and credentialed registered dietitians (ADA, 2007). At the base level, this statement justifiably could imply that research is in order to which examine job satisfaction and its correlation with job retention. However, more advanced and overarching decisions can be made when an understanding about the level of satisfaction dietitians have with their careers and the profession is brought forward. This, in turn, could establish an important and valuable benchmark for future comparisons and advanced research models.

The purpose of this research was to describe the level of career satisfaction and intent to leave the profession of management dietitians. The results help narrow the existing gap in the literature and inform the dietetics community.

Methodology

Sample

Three management-related dietetic practice groups (DPGs) were used for the population of dietitians with management responsibilities. These groups were Management of Food and Nutrition Systems (MFNS), Clinical Nutrition Management (CNM), and the School Nutrition Services (SNS). Of these groups, 3,783 members were available for the final sample of management dietitians. The Medical Nutrition Practice Group (MNPG) was included to represent dietitians without supervisory responsibilities and yielded 115 members for a total available sample of 4,048 members. The total excluded those used for a pilot test (n=133), those without email addresses, and those with rejected/undeliverable addresses upon delivery.

Data Collection

An online survey was used to gather data. An introductory email invited members to further participate in the study by selecting a survey link or opting out. When selected, the survey link proceeded to a detailed cover letter which further described the purpose, process and importance of the research. Instructions on how to be included in a raffle for a \$50 gift card to a national retail store were also provided in the cover letter.

The availability and sources of contact information determined the methods used to deliver the survey instrument. Survey distribution and follow-up reminders for members of the MFNS and SNS practice groups where direct email addresses were available was conducted with the Axio survey system. Members of the CNM practice group received the same survey

instrument through an email blast sent from the CNM executive chairperson. The MNPG member survey was delivered through an email listserv message sent from the MNGP executive chairperson. The survey was available for three weeks with follow-up reminders sent approximately every seven days to non-respondents. The research protocol was approved by the Kansas State University Institutional Review Board. Additional approval was gained from ADA's Practice, Member Interest and Affiliate Relations director per ADA Policy C-17.

Instrument Development

The survey instrument was developed after a thorough review of literature pertaining to the objectives of the study. A pilot study was conducted with a random sample of 133 DPG members. The survey instrument included feedback questions and was sent electronically through the Axio survey to the pilot sample. Feedback was solicited for clarification of the survey process or the instrument. The average completion time of the survey was tracked by Axio and determined to be approximately 20 minutes. The pilot test yielded 73 completed surveys for a response rate of 54.9%. Minor modifications were made to the instrument based on the results of the pilot test.

Measures

Numerous recent studies refer to the research of Greenhaus, Parasuraman, and Wormley (1990), who designed and tested five items to measure career satisfaction. Internal reliability measured by Cronbach's alpha was reported at 0.88 (Greenhaus et al., 1990). The questions measured satisfaction of career success, progress towards career goals, income, advancement and development of new skills rated on a five-point scale anchored (1) strongly disagree to (5) = strongly agree.

Professional involvement and identification may affect the perceptions dietitians have about their jobs and careers. Therefore, professional identity was measured with adapted items from Mael and Ashforth (1992), Stone et al. (1981a), Stone et al., (1981b), and Sauer et al. (2007). The measurement items included opinions about the profession such as self-identify with dietetics, well-being, pride and perceived value in maintaining the RD credential and ADA membership. Other items assessed respondents' reactions to criticism about the profession and likelihood of encouraging others to consider the dietetics profession. Professional involvement was assessed measuring the number of dietetics-related professional memberships, attendance at dietetics-related meetings and conferences, and elected officer positions held.

The literature guided the selection of five self-derived items which were used to assess the intention of dietitians to leave the dietetics profession. A five-point scale anchored (1) not at all likely to (5) extremely likely was used.

Data Analysis

A data file of responses was created using the Statistical Package for the Social Sciences (SPSS) (version 11.5, 2002, SPSS, Inc., Chicago: IL). Statistics were calculated for demographic, operational, satisfaction and intent to leave variables. Statistical procedures included correlation analysis, analysis of variance (ANOVA) and independent samples t-tests to assess relationships among the variables. Cronbach's alpha was used to measure internal consistency of measurement items. Significance for statistical tests was set at $p \leq .05$ unless otherwise indicated.

Results

Of the 4,038 contacts, a total of 1,307 DPG members responded to the questionnaire yielding a 32.4% response rate. Excluded from the data tally were incomplete surveys, participants who opted out of the survey process, those who selected “no” to an initial screening question about having supervisory responsibilities or those who did not indicate a job title. The final sample used for data analysis in this report included 851 management dietitians and 115 non-management dietitians (n=966).

Descriptive characteristics and operational descriptions for management and non-management dietitians were similar and displayed in Tables 5.1 and 5.2 respectively. Of the sample, 96.1% were female, 53% had a master’s degree, and 9% indicated a race other than white. About half (48.9%) of the dietitians were 50 years or older and 41% had 25 years of dietetics-related experience or more. Notable differences between the management and non-management dietitians included lower percentages of non-management dietitians earning \$70,000 or more (0.9% versus 48.5%) and reporting full-time work status (76.6% versus 96.5%). A greater number of non-management dietitians also reported having a supervisor who was an RD compared to management dietitians (54.8% versus 26.2%).

Insert Table 5.1

Insert Table 5.2

The most recent national compensation survey of dietitians (n=11,861) found similar demographic characteristics of dietitians to those of this study. In this report, Rogers (2008) reported that 97% of the dietitians were female, 45% had a master’s degree, and 10% indicated a

race other than white. Also similar to the present study, the median age was 46, 19% were 55 or older and 41% had 20 or more years of dietetics-related experience.

Among participants with management responsibilities, job titles were sorted by 318 (31.9%) clinical nutrition managers or chief clinical dietitians, 287 (28.9%) department or program directors, 61 (6.5%) assistant or associate directors, and 106 (11.2%) managers or assistant managers (Table 5.1). Non-management dietitians were comprised of 115 (12%) clinical dietitians who reported no supervisory responsibilities (Table 5.2).

Career Satisfaction

Career satisfaction was measured with five items derived from related research with other occupations. The overall reliability estimate measured by Cronbach's alpha was 0.89 which indicated strong internal consistency and reliability among the core career satisfaction items for this study.

Mean scores for managers and non-managers for the individual career satisfaction items are provided in Table 5.3. Nearly all career satisfaction items measured neutral or higher for both management and non-management dietitians. The highest mean score for both groups included success achieved in the career, although satisfaction with the development of new skills essentially tied as the highest score for non-managers. The lowest mean score for both management and non-management dietitians was satisfaction with income, $M = 3.63 \pm 1.13$, $M = 2.79 \pm 1.25$ respectively.

Insert Table 5.3

Independent samples t-tests were used to determine if significant differences in mean scores of individual items existed between management and non-management dietitians. Mean scores for management dietitians were significantly higher for all items compared to non-management dietitians. The largest mean differences in career satisfaction were with income, advancement, and career success. Accordingly, when summed and tested, overall career satisfaction scores were significantly different ($t = 6.907, p < 0.001$) between the two groups (Table 5.3).

Individual item scores for the different levels of management dietitians are provided in Tables 5.4. A one-way ANOVA procedure was used to test for significant differences in total career satisfaction scores among job types of management dietitians. Overall satisfaction scores differed significantly across the seven management groups, $F(6, 839) = 5.69, p < 0.001$.

Post-hoc comparisons (Table 5.5) ($p \leq 0.05$) are illustrated for the management dietitians with significant differences in overall satisfaction and individual items. Of the seven groups, district managers ($M = 22.00 \pm 2.73$) and directors (20.56 ± 3.74) had significantly higher overall career satisfaction scores compared to managers ($M = 19.20 \pm 3.50$) and clinical nutrition managers ($M = 19.17 \pm 3.72$).

Insert Table 5.4

Insert Table 5.5

Additional one-way ANOVA procedures were used to examine differences among the individual career satisfaction items for different manager types. Significant differences among different types of managers were found across the mean scores for all individual items (Table

5.5). Clinical nutrition managers had significantly lower mean scores for every career satisfaction item when compared to at least one other management job title. More specifically, clinical nutrition managers were significantly less satisfied with career success, progress towards meeting career goals, and goals for income compared to district managers. Clinical nutrition managers were also significantly less satisfied with goals for advancement and the development of new skills compared to directors. Managers were significantly less satisfied with career success compared to district managers and directors. Managers were also less satisfied with goals for advancement compared to directors.

Mean overall career satisfaction scores were compared across various levels of demographic and operational variables of management dietitians. Initial one-way ANOVA models indicated significant differences in mean overall career satisfaction scores across levels of income $F(6, 820) = 8.504, p = 0.000$, budget responsibility $F(4, 832) = 9.992, p = 0.000$, and number of dietitians worked with on a routine basis $F(5, 832) = 3.82, p = 0.002$ (Table 5.6).

Insert Table 5.6

Post-hoc analysis indicated that overall career satisfaction scores were significantly higher for those earning \$70,000 or more ($M = 20.66 \pm 3.57$) compared to all other income levels above \$40,000 (Table 5.6). Management dietitians with budget responsibility of \$1 million or more had significantly higher mean scores ($M = 20.90 \pm 3.43$) for overall satisfaction compared to all other levels of budget responsibility. Dietitians who worked with more than 25 dietitians on a routine basis had significantly higher satisfaction scores ($M = 21.16 \pm 2.78$) compared to those who reported working with one to three other dietitians ($M = 19.27 \pm 3.77$) and 16 to 25 dietitians ($M = 20.98 \pm 3.53$).

Professional identification was measured to help further assess elements of career satisfaction for dietitians. Item summaries for professional identification measures are provided in Tables 5.7 and 5.8. Both groups of dietitians rated having sense of pride about the profession the highest. Both groups also found more value in maintaining the RD credential compared to ADA membership. Of the initial group of items (Table 5.7), management dietitians rated all professional identification items significantly higher than non-management dietitians except for value with ADA membership and the RD credential.

Insert Table 5.7

Both management and non-management dietitians rated the additional professional identification items consistently neutral except non-management dietitians were significantly more likely to agree with criticism about the profession with other dietitians (Table 5.8). By a small margin, means scores for both groups of dietitians were higher with reactions to hearing criticism about the profession from someone outside of the field of dietetics versus to hearing other dietitians criticize the profession. A larger difference in mean scores between the two questions was observed for non-management dietitians.

Insert Table 5.8

Type and frequency of professional involvement is outlined in Table 5.9. The majority of dietitians in this study were members of at least one professional organization. However, this data is a bit misleading since the sample selection included those who were already members of at least two organizations (DPG and ADA). It is plausible that dietitians considered ADA and DPG membership as one organization. However, although pilot study results did not indicate

this, there could have been confusion with all items regarding what was perceived to be “dietetics-related”.

By percentage, management and non-management dietitians had memberships in a similar number of professional organizations, attended about the same number of professional meetings and held approximately the same number of elected officer positions in the past three years. A very large percentage of both management and non-management dietitians had not held an elected officer position in the last three years, 73.7% and 80.0% respectively.

Insert Table 5.9

The self-reported data for each type of professional involvement was transformed and categorized into two groups; those who had no memberships/attendance/officer positions and those who were involved. Independent samples t-tests were then conducted to determine if a significant difference in overall career satisfaction existed between the two groups. For management and non-management dietitians alike, the mean score for overall career satisfaction was not significantly different ($p \leq 0.05$) between those who were and those who were not involved with any of the professional activities.

Intent to Leave

Intent to leave was measured with five items on a scale anchored (1) not at all likely to (5) extremely likely. Reliability measured by Cronbach’s alpha (0.68) was moderately negatively influenced by the first item, “How likely is it you could find another profession if you were to leave the dietetics profession?” Deleting this item improved reliability to 0.74.

Mean scores for the item, likelihood to look for another profession in the next two years, was 1.88 ± 1.07 for management dietitians and 1.80 ± 1.12 for non-management dietitians (Table

5.10). The mean scores for the item, likelihood to leave the profession during the next two years, were 1.76 ± 0.98 for management dietitians and 1.61 ± 0.94 for non-management dietitians. Independent samples t-tests did not indicate significant differences of intent to leave mean scores between managers and non-managers. ANOVA procedures did not indicate significant differences in mean scores of leave across different types of management dietitians.

Insert Table 5.10

Dietitians were asked if they would choose dietetics again if they could start their careers over, and 83 (9.8%) of management dietitians indicated they would definitely choose another profession. When recoded into groups who indicated they would definitely not choose dietetics again and those who said otherwise, independent samples t-tests revealed significantly higher overall career satisfaction ($t = -6.718, p < 0.001$) among those who would select dietetics again.

Pearson correlations were used to examine relationships between career satisfaction and intent to leave the profession. Item scores for the remaining intent to leave measurement items were summed to form an overall intent to leave score for the purpose of correlation analysis. A significant negative correlation existed between overall career satisfaction and overall intent to leave for both management dietitians and non-managers. However, the strength of the relationship was different for the two groups. For managers, the correlation coefficient was ($r = -0.276$) while for non-managers the correlation was ($r = -0.441$).

Discussion and Implications

The purpose of this study was to explore the level of career satisfaction among dietitians with management responsibilities. In addition, an assessment as to whether or not management

dietitians intended to leave the dietetics profession and the relationship to career satisfaction was evaluated. Data from non-management dietitians were also gathered for comparison purposes.

Career Satisfaction

Career satisfaction in this study was primarily determined by five measurement items that have been used in other research and occupations. Given the exploratory nature of this research, additional variables were used to help further define career satisfaction for dietitians such as professional involvement and identity.

The five career satisfaction items were summed to determine an overall composite satisfaction score for each respondent and group of dietitians. Composite scores below 10 were used to describe career dissatisfaction and scores above 20 defined satisfaction. Overall, management dietitians were moderately satisfied with their careers (19.82 ± 3.73), with district managers the most satisfied (22.82 ± 2.73) and clinical nutrition managers the least satisfied (19.17 ± 3.72). In contrast, non-management dietitians were closer to neutral and considerably less satisfied with their careers (16.44 ± 5.06). The ranking of the five items were similar for both groups of dietitians; satisfaction with success ranked the highest and satisfaction with income the lowest for both groups. However, specific levels of satisfaction for each item were significantly different between some groups.

The frequency distribution for those considered dissatisfied versus satisfied helped illustrate the level of career satisfaction. For management dietitians, only 10 (1.2%) of the management dietitians were considered dissatisfied, 335 (39.4%) were neutral and 501 (58.9%) were satisfied. Compared to non-managers, 16 (13.9%) were dissatisfied, 65 (56.5%) were neutral, and 34 (29.6%) were considered satisfied with their careers.

Generally speaking, management dietitians indicated satisfaction for all five items. Non-management dietitians appeared to be satisfied in fewer areas as compared to management dietitians and dissatisfied with income as it related to career satisfaction. Satisfaction with income was also rated the lowest career satisfier for management dietitians, but considered moderately satisfying.

Income has been a controversial source of satisfaction or dissatisfaction for dietitians for many years (Rehn, Stallings, Wolman, & Cullen, 1989; Sims & Khan, 1986). Since satisfaction with compensation has been a strong correlate of job satisfaction in dietetics-related research for an extended period of time, it is reasonable to assume that dietitians' overall level of satisfaction with their career and/or the profession could be equally impacted.

One aim of this study was to describe level of career satisfaction among dietitians in management positions. Insight of this nature is valuable because the ADA indicated that dietitians with budget authority and supervisory responsibilities are among the highest paid in the profession (Rogers, 2008). However, uncertainty exists if management dietitians are also currently satisfied with their level of compensation as they reflect upon their careers. Results of this study suggested that when taking into account all career stages and levels, management dietitians were satisfied with meeting their goals for income (4.19 ± 0.69).

Although achieving goals for income overall was considered satisfying to management dietitians, opportunity to improve is present given that income was also ranked the lowest of all the measures used. District managers, directors and assistant directors were the most satisfied for meeting goals for income. Clinical nutrition managers were neutral and the least satisfied across all management types. Statistical comparisons determined that clinical nutrition managers

were significantly less satisfied compared to district managers, who were the most satisfied with income (see Table 5.5).

Given that income was neither satisfying nor dissatisfying for some management dietitians, further analysis could cease. However, satisfaction with meeting goals for income at the level of career satisfaction is particularly interesting because 290 (91.2%) of the clinical nutrition managers reported annual incomes of \$50,000 or more. Conversely, only 23 (69.67%) of the supervisors and 82 (77.4%) of managers earned \$50,000 or more, but were similarly or slightly more satisfied than clinical nutrition managers in meeting their goals for income. The frequency of directors and assistant directors earning \$50,000 or more were similar to clinical nutrition managers, 92.6% and 95.2% respectively, but were also slightly more satisfied with meeting goals for income. This data suggests that although clinical nutrition managers reported higher or similar income levels compared to majority of other management dietitians, perceived pay inequity exists.

Management dietitians earning greater than \$70,000 had significantly higher overall career satisfaction scores compared to all other income levels above \$40,000 (see Table 5.6). This aligns with the previous assessment that district managers were the most satisfied with income, with 84.6% of district managers earning more than \$70,000. Further examination however showed that only 31.4% of clinical nutrition managers earned \$70,000 or more. It may be that clinical nutrition managers perceive that a slightly higher income bracket would somehow be reflected in terms of overall satisfaction towards their careers.

The literature suggests it is not always the level of pay that determines satisfaction, but rather perceived fairness with pay. The present study leaves many questions unanswered about the rationale management dietitians, particularly clinical managers, may use to base their income

goals. A measurement item in this study inquired about the perceived level of satisfaction with meeting goals for income. Therefore, management professionals, including clinical managers, likely expressed various levels of satisfaction for a variety of reasons at different stages of their careers. For management dietitians in this study, 42.6% reported less than 10 years of experience with having management responsibilities. However, significantly more (57.8%) of clinical nutrition managers reported less than 10 years of management-related experience; a figure that surpassed all other types of managers. Moreover, clinical managers were similar to all other management types in being in their current jobs for less than 10 years (62.6%). This suggests that that on average, clinical nutrition managers had fewer years of management experience compared to other types of managers in dietetics practice, yet feel much differently in regards to pay and other satisfaction criteria. Variances in reported satisfaction could partly be explained by the reasons, preparedness, expectations and assumptions relative to moving into a management position, particularly for those with fewer years of management experience.

While career success and advancement were both rated moderately high across most management types, statistical comparisons showed some variance between groups of management dietitians. Both managers and clinical nutrition managers were significantly less satisfied with career success compared to district managers and directors. Similarly, clinical managers and managers were both significantly less satisfied than directors in terms of career advancement. A common thread to these indicators could lie somewhere within the organizations and/or level of supervision. The traditional organizational structure in dietetics practice is such that most managers and clinical nutrition managers report vertically to department directors, who were significantly more satisfied than both. As a subordinate, career success and advancement may be perceived as function of support or mentoring from a direct

supervisor. As such, tradition would have it that management dietitians serving as assistant directors, managers, clinical manager and supervisors would likely report vertically to other management dietitians within moderate to larger departments or organizations. Although significant differences in career success or advancement scores were not found between those who had supervisors who were RDs and those who did not, results showed that 55.7% of assistant directors and 51.5% of supervisors had primary supervisors who were RDs. Comparatively, only 24.7% of managers and 34.6% of clinical nutrition managers reported the same. In the end, perceptions about career success or advancement may be moderated by a host of intrinsic or extrinsic variables stemming within and outside of the organization. Future research may want to want to examine whether having a supervisor as an RD is important to career success, advancement or satisfaction.

Finally, the development of new skills and meeting overall career goals was rated moderately satisfying across most groups of management dietitians. However, clinical managers again were significantly less satisfied with both measures compared to directors and district managers. To address this, a better understanding what clinical managers consider to be new skills or goals is in order. This is not an impossible task to achieve. It would be beneficial to turn to the set of 5-year activities required of all registered dietitians; the Commission on Dietetic Registration (CDR) Portfolio Process. The CDR portfolio process guides registered dietitians in the development of 5-year goals which encourage the development of new skills and career goals through continuous life-long learning. It would be worth-while to know if relationships exist between career satisfaction and the self-derived goals mandated by CDR. Frustration in terms of career satisfaction could take the form of unrealistic career goals or new skills, frustration with CDR portfolio process, and lack of resources in gaining continuing education. It is also possible

that a significant gap exists with the goals that dietitians have established for themselves professionally and those that pertain to their jobs. Additional research is justified in this area.

Related to the CDR portfolio process for dietitians are factors of professional involvement and/or professional identity. To maintain the RD credential, dietitians must maintain a specific number of continuing education hours, which is often supplemented by attendance at professional meetings or holding elected officer positions. Therefore, this study explored the level of involvement and satisfaction with career. Further, a secondary series of statements gathered opinions about professional identity to evaluate trends.

Overall, most dietitians were members of at least one professional organization and had attended at least one local, state, or national conference in the past three years. However, the sponsorship and content of these meetings and conferences is unknown. Although an in-depth analysis of the frequency and type of involvement among different types of managers is left for future study, there was not a significant difference with overall career satisfaction between those who did and did not attend meetings or conferences. This suggests that dietitians' level of career satisfaction as measured in this study was not greatly impacted by attendance or professional involvement in terms of attending meetings. It is possible satisfaction as it relates to attendance at meetings has more to do with what was gained from attending versus frequency of attending.

More concerning was the lower percentages of dietitians who had held elected officer positions. It is conflicting that respondents as a whole could identify with their profession, stated a sense of pride and well-being, yet held few positions that essentially shape the vision and future of the profession. Of course, this could be due to a variety of reasons such as excessive time commitments, conflicts with employer demands and flexibility or less than desirable past experiences with holding such a position. Furthermore, a high percentage of dietitians in this

study had more than 10 years of dietetics-related experience. Therefore, holding elected officer positions could have occurred in the years prior to those addressed in the study.

Overall, management dietitians reported high levels of pride, self-identity and sense of well-being about the dietetics profession. Non-management dietitians were observed to score significantly lower in the same areas. Interestingly, non-management dietitians were coded as clinical dietitians for this study and clinical dietitians also represent the majority of ADA members and dietetics practitioners in the United States. However, the results here suggest that clinicians identify less with the dietetics profession compared to management dietitians.

Additional discussion is prompted with regards to the perceived value in maintaining the RD credential and/or ADA membership. ADA membership is not required in order to be a registered dietitian. Both management and non-management dietitians alike were neutral with regards to the value of maintaining ADA membership although the likelihood of discontinuing it was extremely low for both groups. Variances between those rating neutral, low or high in regards to career success, attainment of goals and other criteria could hold their most identifiable primary professional organization, in this case ADA, responsible for these things.

In a different light, the value in maintaining the RD credential was rated consistently higher for both groups of dietitians, but more so for management dietitians. This is particularly interesting because for the vast majority of clinical dietitians, the RD credential is a required part of the job, which is not often the case for management dietitians in foodservice roles.

Both groups of dietitians were more likely to advise a relative to go into dietetics rather than selecting it again for themselves. However, neither indicator was far from neutral. More apparent is that for management dietitians, there seems to be a more complex and conflicting set of feelings. Overall, management dietitians were significantly more satisfied with their careers

and most elements about it, reported a high level of pride, and reported exceptional value in maintaining the RD credential. However, they did not demonstrate a high level of encouragement to others considering dietetics nor felt strongly that they would do it all over again if given the chance.

Intent to Leave

The majority of dietitians in this study did not intend to look for other professions or leave the dietetics profession in the next two years. When controlled for respondents considering retirement, 90 (10.6%) management dietitians indicated that it was likely or extremely likely they would look for another profession in next two years. Also, for management dietitians, 59 (6.9%) indicated it was likely or extremely likely they would leave the profession in the next two years. Taking everything into consideration, management dietitians were satisfied with their careers and also demonstrated low intent to leave. However, a smaller effect size was seen with management dietitians given the lower correlation between career satisfaction and intent to leave the profession. Non-management dietitians' levels of career satisfaction were more strongly associated with intent to leave.

The lower correlation between career satisfaction and intent to leave among management dietitians suggests that the career satisfaction items used for this study had less to do with the possibility of staying or leaving in the profession as compared to non-management dietitians. It is interesting to point out that even with the recent economic downturn, the item deleted for intent to leave correlation comparison due to reliability issues "*How likely is it you could find another profession if you were to leave dietetics*" showed that 380 (44.7%) stated it was likely or extremely likely they could find another profession. In this case, leaving the profession may or may not be a negative indicator. For some management dietitians, if dietetics does not provide

the challenge, stimulus or income they desire, leaving might be a reasonable option. For others, leaving the profession may be due to taking a high-level administrative position within a dietetics-related environment such as healthcare. It is unknown if dietitians would view these situations as leaving the dietetics profession or supplementing it. It would be advantageous to examine dietetics professionals who have essentially left the dietetics profession in the traditional sense, yet perform at a higher level of responsibility and remain loyal to the profession in terms of attendance and involvement.

Fortunately, intent to leave dietetics was not prevalent at the same time that satisfaction existed for the professionals in this study. The specific factors that may contribute to leaving and/or found to be dissatisfying should continue to be examined.

Conclusions

This research described the current status of career satisfaction of dietitians. Among 966 dietitians who were members of management-related dietetics practice groups, career satisfaction was moderately high. Management dietitians were also significantly more satisfied compared to non-managers and career satisfaction was significantly different between types of management RDs.

Finally, this study sought to determine if dietitians intend to leave the profession. This was not the case for the majority of practitioners. Since dietitians intend to remain in the dietetics profession, the next logical step would be to elaborate upon elements that are satisfying while also developing methods to improve the less than desirable traits of work for dietetics professionals.

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Table 5.1: Characteristics of Management Dietitians (N=851)

| Characteristic | n | %^a | Characteristic | n | %^a |
|--------------------------|----------|----------------------|----------------------------------------|----------|----------------------|
| Age | | | Route to registration | | |
| 20 – 29 years | 46 | 5.4 | Post-baccalaureate dietetic internship | 445 | 52.3 |
| 30 – 39 years | 176 | 20.7 | Coordinated program in dietetics | 195 | 22.9 |
| 40 – 49 years | 191 | 22.4 | Master’s degree plus experience | 132 | 15.5 |
| 50 – 59 years | 368 | 43.2 | Traineeship | 60 | 7.1 |
| 60 years or older | 62 | 7.3 | Other | 15 | 1.8 |
| Gender | | | Ethnicity | | |
| Female | 816 | 95.9 | Caucasian | 764 | 89.8 |
| Male | 34 | 4.0 | Asian/Pacific Islander | 34 | 4.0 |
| Education | | | Hispanic | 16 | 1.9 |
| Baccalaureate degree | 203 | 23.9 | African-American | 15 | 1.8 |
| Some graduate coursework | 179 | 21.0 | Other | 13 | 1.5 |
| Master’s degree | 449 | 52.8 | Native American | 1 | 0.1 |
| Doctoral degree | 19 | 2.2 | Relationship status | | |
| Annual Income | | | Married | 601 | 70.6 |
| under \$19,000 | 2 | 0.2 | Single | 116 | 13.6 |
| \$20,000 - \$29,000 | 2 | 0.2 | Divorced | 87 | 10.2 |
| \$30,000 - \$39,000 | 12 | 1.4 | Widowed | 19 | 2.2 |
| \$40,000 - \$49,000 | 53 | 6.2 | Living with partner | 17 | 2.0 |
| \$50,000 - \$59,000 | 145 | 17.0 | | | |
| \$60,000 - \$69,000 | 205 | 24.1 | | | |
| \$70,000 or greater | 413 | 48.5 | | | |

^aResponses may not equal 100% due to non-response to a question.

Table 5.1: Characteristics of Management Dietitians (N=851) (Cont.)

| Characteristic | n | %^a | Characteristic | n | %^a |
|------------------------------------------------------|----------|----------------------|-----------------------------------------------|----------|----------------------|
| <i>Years of dietetics-related experience</i> | | | <i>Primary place of employment</i> | | |
| 3 or less | 14 | 1.6 | Hospital or Medical Center | 609 | 71.6 |
| 3 – 10 years | 123 | 14.5 | K-12 School | 103 | 12.1 |
| 11 – 15 years | 124 | 14.6 | Long-term care facility | 50 | 5.9 |
| 16 – 25 years | 221 | 26.0 | Government or Military | 23 | 2.7 |
| 25 years or more | 364 | 42.8 | Other | 20 | 2.4 |
| <i>Years in present job</i> | | | College or University | 18 | 2.1 |
| 3 or less | 203 | 23.9 | Other medical facility | 12 | 1.4 |
| 3 – 10 years | 329 | 38.7 | Commercial or Industry | 8 | 0.9 |
| 11 – 15 years | 114 | 13.4 | <i>Employer type</i> | | |
| 16 – 25 years | 130 | 15.3 | Self-operated organization | 598 | 70.3 |
| 25 years or more | 67 | 7.9 | Contract management company | 225 | 26.4 |
| <i>Have worked continuously</i> | | | Self-employed | 6 | 0.7 |
| Yes | 747 | 87.9 | <i>Employment status</i> | | |
| No | 98 | 11.5 | Full-time | 821 | 96.5 |
| <i>Have worked outside of dietetics</i> | | | Part-time | 16 | 1.9 |
| Yes | 142 | 16.7 | <i>Number of hours worked per week</i> | | |
| No | 691 | 81.2 | 19 hours or less | 4 | 0.5 |
| <i>Years with management responsibilities</i> | | | 20 – 39 hours | 8 | 0.9 |
| 3 or less | 122 | 14.3 | 40 - 49 hours | 416 | 48.9 |
| 4 – 10 years | 241 | 28.3 | 50 or more hours | 380 | 44.7 |
| 11 – 15 years | 96 | 11.3 | <i>Plan to retire within 3 years</i> | | |
| 16 – 25 years | 219 | 25.7 | Yes | 33 | 3.9 |
| 26 years or more | 137 | 16.1 | No | 727 | 85.4 |
| | | | Maybe | 80 | 9.4 |

^aResponses may not equal 100% due to non-response to a question.

Table 5.1: Characteristics of Management Dietitians (N=851) (Cont.)

| Characteristic | n | %^a | Characteristic | n | %^a |
|---------------------------------------|----------|----------------------|-------------------------------------------------|----------|----------------------|
| <i>Job title</i> | | | <i>Level of budget responsibility</i> | | |
| Clinical nutrition manager | 318 | 37.4 | No budget responsibility | 224 | 26.3 |
| Department/Program Director | 287 | 33.7 | \$1K - \$99K | 99 | 11.6 |
| Manager | 106 | 12.5 | \$100K - \$499K | 133 | 15.6 |
| Assistant/Associate Director | 61 | 7.2 | \$500K - \$999K | 97 | 11.4 |
| Supervisor/Coordinator | 33 | 3.9 | \$1 million or greater | 288 | 33.8 |
| District/Division/Regional manager | 26 | 3.1 | <i>Number of employees supervised</i> | | |
| General/Multi-site/Multi-unit manager | 20 | 2.4 | No employees | 7 | 0.8 |
| <i>Employment setting</i> | | | 1 – 9 employees | 266 | 31.3 |
| Rural | 52 | 6.1 | 10 – 19 employees | 213 | 25.0 |
| Suburban | 237 | 27.8 | 20 – 29 employees | 111 | 13.0 |
| Small metropolitan | 221 | 26.0 | 30 to 39 employees | 95 | 11.2 |
| Medium metropolitan | 149 | 17.5 | 40 or more employees | 150 | 17.6 |
| Large metropolitan | 175 | 20.6 | <i>Number of RDs routinely work with</i> | | |
| <i>Primary supervisor RD</i> | | | No dietitians | 126 | 14.8 |
| No | 223 | 26.2 | 1 – 3 dietitians | 225 | 26.6 |
| Yes | 595 | 69.6 | 4 – 10 dietitians | 285 | 33.5 |
| | | | 11 – 15 dietitians | 105 | 12.3 |
| | | | 16 – 25 dietitians | 58 | 6.8 |
| | | | 25 or more dietitians | 43 | 5.1 |

^aResponses may not equal 100% due to non-response to a question.

Table 5.2: Characteristics of Non-Management Dietitians (N=115)

| Characteristic | n | %^a | Characteristic | n | %^a |
|--------------------------|----------|----------------------|----------------------------------------|----------|----------------------|
| Age | | | Route to registration | | |
| 20 – 29 years | 12 | 10.4 | Post-baccalaureate dietetic internship | 62 | 53.9 |
| 30 – 39 years | 30 | 26.1 | Coordinated program in dietetics | 22 | 19.1 |
| 40 – 49 years | 26 | 22.6 | Master’s degree plus experience | 15 | 13.0 |
| 50 – 59 years | 34 | 29.6 | Traineeship | 60 | 5.2 |
| 60 years or older | 9 | 7.8 | Other | 95 | 7.8 |
| Gender | | | Ethnicity | | |
| Female | 112 | 97.4 | Caucasian | 107 | 93.0 |
| Male | 3 | 2.6 | Asian/Pacific Islander | 6 | 5.2 |
| Education | | | Relationship status | | |
| Baccalaureate degree | 31 | 27.0 | Married | 82 | 71.3 |
| Some graduate coursework | 18 | 15.7 | Single | 16 | 13.9 |
| Master’s degree | 64 | 55.7 | Divorced | 12 | 10.4 |
| Doctoral degree | 29 | 1.7 | Widowed | 2 | 1.7 |
| Annual Income | | | Living with partner | 1 | 0.9 |
| under \$19,000 | 4 | 3.5 | | | |
| \$20,000 - \$29,000 | 7 | 6.1 | | | |
| \$30,000 - \$39,000 | 18 | 15.7 | | | |
| \$40,000 - \$49,000 | 34 | 29.6 | | | |
| \$50,000 - \$59,000 | 27 | 23.5 | | | |
| \$60,000 - \$69,000 | 18 | 16.5 | | | |
| \$70,000 or greater | 1 | 0.9 | | | |

^aResponses may not equal 100% due to non-response to a question.

Table 5.2: Characteristics of Non-Management Dietitians (N=115) (Cont.)

| Characteristic | n | %^a | Characteristic | n | %^a |
|-----------------------------------------------------|----------|----------------------|-----------------------------------------------|----------|----------------------|
| <i>Years of dietetics-related experience</i> | | | <i>Employer type</i> | | |
| 3 or less | 9 | 7.8 | Self-operated organization | 91 | 79.1 |
| 3 – 10 years | 25 | 21.7 | Contract management company | 16 | 13.9 |
| 11 – 15 years | 18 | 15.7 | Self-employed | 3 | 2.6 |
| 16 – 25 years | 23 | 20.0 | <i>Employment status</i> | | |
| 25 years or more | 38 | 33.0 | Full-time | 88 | 76.5 |
| <i>Years in present job</i> | | | Part-time | 22 | 19.1 |
| 3 or less | 35 | 30.4 | <i>Number of hours worked per week</i> | | |
| 3 – 10 years | 36 | 31.3 | 19 hours or less | 9 | 7.8 |
| 11 – 15 years | 18 | 15.7 | 20 – 39 hours | 27 | 23.5 |
| 16 – 25 years | 10 | 8.7 | 40 - 49 hours | 68 | 59.1 |
| 25 years or more | 14 | 12.2 | 50 or more hours | 9 | 7.8 |
| <i>Have worked continuously</i> | | | <i>Plan to retire within 3 years</i> | | |
| Yes | 102 | 88.7 | Yes | 43 | 3.5 |
| No | 11 | 9.6 | No | 100 | 87.0 |
| <i>Have worked outside of dietetics</i> | | | Maybe | 70 | 6.1 |
| Yes | 20 | 17.4 | <i>Employment setting</i> | | |
| No | 93 | 80.9 | Rural | 12 | 10.4 |
| <i>Primary place of employment</i> | | | Suburban | 35 | 30.4 |
| Hospital or Medical Center | 82 | 71.3 | Small metropolitan | 30 | 26.1 |
| Other medical facility | 14 | 12.3 | Medium metropolitan | 19 | 16.5 |
| Long-term care facility | 8 | 7.0 | Large metropolitan | 17 | 14.8 |
| Other | 5 | 4.3 | | | |
| Government or Military | 4 | 3.5 | | | |

^aResponses may not equal 100% due to non-response to a question.

Table 5.2: Characteristics of Non-Management Dietitians (N=115) (Cont.)

| Characteristic | n | %^a |
|-------------------------------------------------|----------|----------------------|
| <i>Primary supervisor RD</i> | | |
| No | 63 | 54.8 |
| Yes | 46 | 40.0 |
| <i>Number of RDs routinely work with</i> | | |
| No dietitians | 27 | 23.5 |
| 1 – 3 dietitians | 45 | 39.1 |
| 4 – 10 dietitians | 35 | 30.4 |
| 11 – 15 dietitians | 65 | 5.2 |

^aResponses may not equal 100% due to non-response to a question.

Table 5.3: Comparison of Career Satisfaction Measures between Management and Non-Management Dietitians

| | Mean ± Standard Deviation | | t | Sig. |
|---------------------------------------------------------------------------------------------------------|---------------------------|-------------------------|--------------|---------------|
| | Managers (n=851) | Non-Managers (n=115) | | |
| I am satisfied with the success I have achieved in my career. | 4.22±0.80 | 3.52±1.10 | 6.528 | 0.000* |
| I am satisfied with the progress I have made toward meeting my overall career goals. | 4.14±0.83 | 3.50±1.12 | 5.835 | 0.000* |
| I am satisfied with the progress I have made toward meeting my goals for the development of new skills. | 3.96±0.87 | 3.52±1.19 | 3.864 | 0.000* |
| I am satisfied with the progress I have made toward meeting my goals for advancement. | 3.87±0.95 | 3.10±1.16 | 6.825 | 0.000* |
| I am satisfied with the progress I have made toward meeting my goals for income. | 3.63±1.13 | 2.79±1.25 | 6.850 | 0.000* |
| Overall Career Satisfaction | 19.82±3.73 | 16.44±5.06 | 6.907 | 0.000* |

Scale values range from Strongly Disagree (1) to Strongly Agree (5).

*p ≤ 0.05

Table 5.4: Comparison of Career Satisfaction between Management Dietitians (N=966)

| | Mean ± Standard Deviation | | | | | | |
|---------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|---------------------|---------------------------------|--------------------|--------------------------------|----------------------|
| | District Manager (n=26) | General Manager (n=20) | Director (n=287) | Assistant Director (n=61) | Manager (n=106) | Clinical Manager (n=318) | Supervisor (n=33) |
| I am satisfied with the success I have achieved in my career. | 4.65±0.56 | 4.40±0.68 | 4.34±0.76 | 4.18±0.96 | 4.03±0.81 | 4.14±0.78 | 4.06±0.90 |
| I am satisfied with the progress I have made toward meeting my overall career goals. | 4.54±0.76 | 4.15±0.88 | 4.23±0.84 | 4.13±0.85 | 4.08±0.75 | 4.04±0.83 | 4.09±0.68 |
| I am satisfied with the progress I have made toward meeting my goals for the development of new skills. | 4.35±0.75 | 4.30±0.98 | 4.08±0.87 | 3.92±0.76 | 3.91±0.88 | 3.84±.87 | 4.00±.83 |
| I am satisfied with the progress I have made toward meeting my goals for advancement. | 4.27±0.72 | 3.90±0.97 | 4.05±0.95 | 3.87±0.97 | 3.68±0.91 | 3.75±0.96 | 3.88±0.78 |
| I am satisfied with the progress I have made toward meeting my goals for income. | 4.19±0.69 | 3.65±1.10 | 3.84±1.15 | 3.72±1.11 | 3.54±1.12 | 3.41±0.13 | 3.61±0.93 |
| Overall Satisfaction | 22.00±2.73 | 20.40±3.55 | 20.56±3.74 | 19.82±3.95 | 19.20±3.50 | 19.17±3.72 | 19.64±3.31 |

Scale values range from Strongly Disagree (1) to Strongly Agree (5).

Table 5.5: ANOVA Post-Hoc Comparisons of Career Satisfaction Measures and Overall Satisfaction between Management Dietitians

| | Mean ± Standard Deviation | | | | <i>F</i> ^a value | <i>P</i> value |
|---------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|-------------------|
| | District Manager (n=26) | Director (n=287) | Manager (n=106) | Clinical Manager (n=318) | | |
| I am satisfied with the success I have achieved in my career. | 4.65±0.56 ^x | 4.34±0.76 ^x | 4.03±0.81 ^y | 4.14±0.78 ^y | 4.564 | 0.002* |
| I am satisfied with the progress I have made toward meeting my overall career goals. | 4.54±0.76 ^x | 4.23±0.84 ^{xy} | 4.08±0.75 ^{xy} | 4.04±0.83 ^y | 2.585 | 0.010* |
| I am satisfied with the progress I have made toward meeting my goals for the development of new skills. | 4.35±0.75 ^{xy} | 4.08±0.87 ^x | 3.91±0.88 ^{xy} | 3.84±.87 ^y | 3.452 | 0.002* |
| I am satisfied with the progress I have made toward meeting my goals for advancement. | 4.27±0.72 ^{xy} | 4.05±0.95 ^x | 3.68±0.91 ^y | 3.75±0.96 ^{xy} | 4.009 | 0.001* |
| I am satisfied with the progress I have made toward meeting my goals for income. | 4.19±0.69 ^x | 3.84±1.15 ^{xy} | 3.54±1.12 ^{xy} | 3.41±0.13 ^y | 5.012 | 0.000* |
| Overall Satisfaction | 22.00±2.73^x | 20.56±3.74^x | 19.20±3.50^y | 19.17±3.72^y | 4.410 | 0.000* |

Scale values range from Strongly Disagree (1) to Strongly Agree (5).

Table 5.6: ANOVA Post-Hoc Comparisons of Overall Career Satisfaction between Demographic Variables of Management Dietitians

| Mean ± Standard Deviation | | | | | | |
|---------------------------------------|----------------------------|----------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| Income Level | | | | | | |
| < \$19K | \$20K - \$29K | \$30K - \$39K | \$40K - \$49K | \$50K - \$59K | \$60K - \$69K | > \$70K |
| 19.50 ± 7.78 ^{xy} | 17.50 ± 0.71 ^{xy} | 18.08 ± 3.21 ^{xy} | 18.15 ± 4.37 ^y | 18.71 ± 3.66 ^y | 19.61 ± 3.44 ^y | 20.66 ± 3.57 ^x |
| Number of Dietitians Work With | | | | | | |
| None | 1 - 3 | 4 - 10 | 11 - 15 | 16 - 25 | > 25 | |
| 19.48 ± 4.14 ^{xy} | 19.27 ± 3.77 ^y | 20.10 ± 3.55 ^{xy} | 19.65 ± 3.77 ^{xy} | 20.98 ± 3.53 ^y | 21.16 ± 2.78 ^x | |
| Level of Budget Responsibility | | | | | | |
| No Budget | | \$1K - \$99K | \$100K - \$499K | \$500K - \$999K | > 1M | |
| 18.96 ± 3.81 ^y | | 19.68 ± 3.63 ^y | 19.34 ± 3.62 ^y | 19.72 ± 3.96 ^y | 20.90 ± 3.43 ^x | |

Note: Means with different superscripts (x, y, z) differ significantly by Tukey's Post-Hoc test, ($p \leq 0.05$).

Table 5.7: Comparison of Professional Identification Measures between Management and Non-Management Dietitians

| | Mean ± Standard Deviation | | t | Sig. |
|-----------------------------------------------------------------------------------------------|---------------------------|-------------------------|-------|--------|
| | Managers (n=851) | Non-Managers (n=115) | | |
| I get a sense of pride from my profession. | 4.09±0.86 | 3.82±1.10 | 2.601 | 0.010* |
| My chosen profession gives me a sense of well-being. | 4.04±0.88 | 3.75±1.12 | 2.689 | 0.008* |
| I identify strongly with my profession. | 4.01±0.90 | 3.71±1.06 | 2.869 | 0.005* |
| If I were to rank in importance, those things related to my work would be at or near the top. | 3.71±0.99 | 3.39±1.02 | 3.173 | 0.002* |
| If I were to describe myself to someone, I would probably begin by stating my profession. | 3.55±1.10 | 3.25±1.04 | 2.825 | 0.005* |
| I find value in maintaining my RD credential. | 4.59±0.67 | 4.48±0.72 | 1.596 | 0.113 |
| I find value in maintaining my ADA membership. | 3.70±1.11 | 3.60±1.26 | 0.780 | 0.437 |

Scale values range from Strongly Disagree (1) to Strongly Agree (5).

*p ≤ 0.05

Table 5.8: Comparison of Additional Professional Identification Measures between Management and Non-Management Dietitians

| | Mean ± Standard Deviation | | t | Sig. |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------|-------|--------|
| | Managers (n=851) | Non- Managers (n=115) | | |
| How do you feel when you hear someone outside of the profession criticizing the field? ^a | 3.46±1.09 | 3.43±1.07 | 0.250 | 0.803 |
| How do you react when you hear other dietitians criticizing the profession of dietetics? ^a | 3.35±1.27 | 2.92±1.46 | 2.984 | 0.003* |
| How would you advise a relative who is considering going into the dietetics profession? ^b | 3.55±1.16 | 3.34±1.28 | 1.690 | 0.093 |
| If you could begin your career over again, how likely would you be to choose the dietetics profession again? ^c | 3.24±1.22 | 3.17±1.31 | 0.531 | 0.596 |

^aScale values range from I often agree with the criticism (1) to It makes me quite angry (5).

^bScale values range from Definitely would advise against it (1) to Definitely would encourage it (5).

^cScale values range from Definitely would choose another profession (1) to Definitely would choose dietetics (5).

*p ≤ 0.05

Table 5.9: Comparison of Professional Involvement between Management and Non-Management Dietitians

| Type of Involvement | | Managers (n=851) n (%) ^a | Non-Managers (n=115) n (%) ^a |
|--------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------|-----------------------------------------------|
| Number of current memberships in dietetics-related professional organizations | 0 | 6 (0.7) | - |
| | 1-3 | 632 (74.3) | 75 (65.2) |
| | 4-6 | 193 (22.7) | 31 (27.0) |
| | >7 | 17 (2.0) | 9 (7.8) |
| Frequency of attendance at local, state, or district meetings of the dietetics-related professional organizations ^b | 0 | 130 (15.3) | 8 (7.0) |
| | 1-3 | 342 (40.2) | 59 (51.3) |
| | 4-6 | 176 (20.7) | 19 (16.5) |
| | 7-10 | 89 (10.5) | 15 (13.0) |
| | >11 | 108 (12.7) | 12 (10.4) |
| Frequency of attendance at national conferences of the dietetics-related professional organizations ^b | 0 | 275 (32.3) | 45 (39.1) |
| | 1-3 | 498 (58.5) | 66 (57.4) |
| | 4-6 | 56 (6.6) | 3 (2.6) |
| | >7 | 15 (1.8) | 1 (0.9) |
| Number of elected officer positions held in dietetics-related associations ^b | 0 | 627 (73.7) | 92 (80.0) |
| | 1-3 | 208 (24.4) | 22 (19.1) |
| | 4-6 | 12 (1.4) | - |

^aResponses may not equal 100% due to non-response to a question.

^bMeetings attended/positions held during the past 3 years

Table 5.10: Comparison of Intent to Leave the Dietetics Profession between Management and Non-Management Dietitians

| | Mean ± Standard Deviation | | t | Sig. |
|---------------------------------------------------------------------------------------|---------------------------|-------------------------|--------|-------|
| | Managers (n=851) | Non-Managers (n=115) | | |
| How likely is it that you will look for another profession in the next two years? | 1.88±1.07 | 1.80±1.12 | 0.681 | 0.497 |
| How likely is it that you will leave the dietetics profession in the next two years? | 1.76±0.98 | 1.61±0.94 | 1.645 | 0.102 |
| How likely is it that you will discontinue your ADA membership in next the two years? | 1.75±1.06 | 1.88±1.03 | -1.270 | 0.206 |
| How likely is it that you will discontinue your RD credential in the next two years? | 1.27±0.70 | 1.27±0.78 | 0.013 | 0.989 |

Scale values range from Not at all likely (1) to Extremely likely (5).

*p ≤ 0.05

CHAPTER 6 - SUMMARY AND CONCLUSIONS

Summary of Study

The nature of this study was exploratory and descriptive in order to help form a baseline from which to formulate additional research questions and incorporate more robust models in future research. The primary objective was to determine if management dietitians were satisfied with their jobs and the profession of dietetics, expressed as career satisfaction. Thus, two theoretically-related constructs were examined: job satisfaction and career satisfaction. There is no lack of highly sophisticated models that examine job satisfaction from every imaginable angle. Less sophisticated are the models and methods used to describe career satisfaction. Therefore, a straight-forward research approach was used since a recent benchmark had not been established for job or career satisfaction for dietitians. From a practical viewpoint, it was reasonable to capture the opinions about levels of both job and career satisfaction at the same time.

The research questions and hypotheses were devoted to describing the level of job satisfaction and career satisfaction of management dietitians. Of the numerous correlates with work-related satisfaction in other research, intent to leave when measured stands out as one of the strongest. Therefore, the secondary series of research questions set out to determine if dietitians intended to leave and how this correlation matched established findings. The final set of research questions were designed describe relationships among all the variables.

The Job Satisfaction Survey (JSS) developed by Dr. Paul Spector (1985) was used to measure job satisfaction. The JSS represents nine facets; satisfaction with pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of the work, and communication. Intent to leave the job was measured with three items adapted from Mobley, Horner, and Hollingsworth, (1978), but due to low reliability, only two items were used.

Career satisfaction assessment was guided by the popular work of Greenhaus, Parasuraman, and Wormley (1990). The five items measured satisfaction of career success, progress towards career goals, income, advancement and development of new skills. Intent to leave the dietetics profession was measured similarly to intent to leave the job. Included with the intent to leave the profession items were measures specific to dietitians such as likelihood of maintaining ADA membership and the RD credential in the near future, two questions not asked before in related research.

Additional measures were used to help describe career satisfaction. Professional involvement and identification may affect the perceptions dietitians have about their jobs and careers. Therefore, professional identity was measured with adapted items from Mael and Ashforth (1992), Stone, Vaden, and Vaden (1981a), Stone, Vaden, and Vaden (1981b), and Sauer, Shanklin, Canter and Angell (2007). These measurement items included opinions about the profession such as self-identify with dietetics, pride and perceived value in maintaining the RD credential and ADA membership. Other items assessed respondents' reactions to criticism about the profession and likelihood of encouraging others to consider the dietetics profession. Professional involvement was assessed by measuring the number of professional memberships, attendance at dietetics-related meetings and conferences, and elected officer positions held.

Finally, 18 questions monitored attitudes about factors affecting professional practice in dietetics.

Three management-related dietetic practice groups (DPGs) were used for the sample of dietitians with management responsibilities including Management of Food and Nutrition Systems (MFNS), Clinical Nutrition Management (CNM), School Nutrition Services (SNS). The Medical Nutrition Practice Group (MNPG) was included in order to represent dietitians in clinical practice.

The data collection instrument in this study was an online questionnaire. The research protocol was approved by the Kansas State University Institutional Review Board and ADA's Practice, Member Interest and Affiliate Relations. The survey instrument was pilot tested for a two-week period among 133 dietitians and yielded a response rate of 54.9%. Minor modifications were made based on the results of the pilot test. The final survey instrument was sent to 4,038 members available for the study.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) (version 11.5, 2002, SPSS, Inc., Chicago: IL). Descriptive statistics were calculated for demographic, satisfaction, intent to leave, profession identification and other variables. Inferential statistics including correlation analysis, ANOVAs, and regression analysis were performed to assess relationships. Cronbach's alpha was used to measure internal consistency of measurement items.

Summary of Major Findings

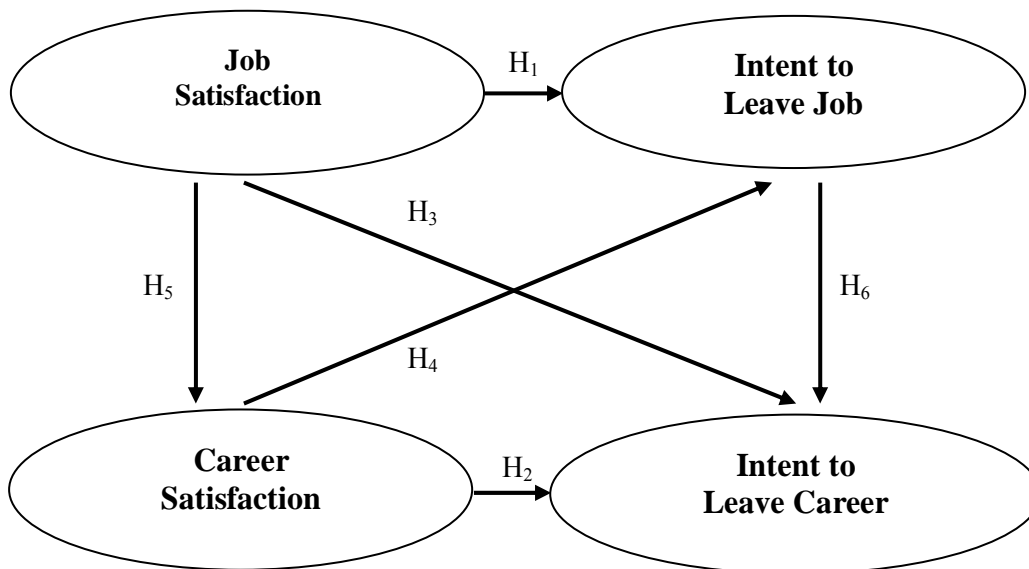
A total of 1,307 DPG members responded to the questionnaire yielding a 32.4% response rate. The final sample included 966 surveys considered appropriate for data analysis.

The sample resembled the demographic profile of the ADA. Approximately 96% were female, 53% had a master's degree, and 9% indicated a race other than white. About half

(48.9%) of the dietitians were 50 years or older and 41% had 25 years of dietetics-related experience or more. Notable differences between the management and non-management dietitians included lower percentages of non-management dietitians earning \$70,000 or more (0.9% versus 48.5%), working full-time (76.6% versus 96.5%). A greater number of non-management dietitians reported having a supervisor who was an RD compared to management dietitians (54.8% versus 26.2%).

Among participants with management responsibilities, job titles were sorted by 318 (31.9%) clinical nutrition managers or chief clinical dietitians, 287 (28.9%) department or program directors, 61 (6.5%) assistant or associate directors, and 106 (11.2%) managers or assistant managers. Non-management dietitians were comprised of 115 (12%) clinical dietitians without supervisory responsibility.

The following illustration guided the theoretical relationships:



Job Satisfaction

Research Question 1: What is the level of job satisfaction of registered dietitians in management roles?

Overall reliability for the job satisfaction items as measured by Cronbach's alpha was reported at 0.93 indicating internal consistency and reliability. Overall job satisfaction measurement was achieved by summing the composite subscale scores for all nine subscale facets. Subscale scores were determined by sums of four individual items for each subscale after reverse-coding for negatively worded items. The overall satisfaction score for management dietitians was 153.75 ± 26.68 which exceeded the national normative values across multiple occupations (138 ± 21.6). Spector also suggested that overall satisfaction scores over 144 generally indicate job satisfaction (see <http://chuma.cas.usf.edu/~spector/scales/jsspag.html>). The highest composite subscale scores for management dietitians were nature of the work ($M = 20.04 \pm 3.44$), supervision ($M = 19.43 \pm 4.54$) and coworkers ($M = 18.60 \pm 3.55$). Calbeck, Vaden and Vaden (1979) and Sims and Khan (1986) reported similar findings regarding satisfaction with the work itself and coworkers among dietitians. In the present study, the lowest satisfaction score was operating conditions ($M = 12.86 \pm 3.88$).

Comparatively, the mean overall satisfaction score for non-management dietitians was 140.79 ± 30.26 . The overall satisfaction score was significantly lower for non-management dietitians ($t = 4.368, p < 0.001$). Six out of nine subscale scores were also significantly lower than those for management dietitians.

An objective of the study was to determine job satisfaction of management dietitians. Therefore, differences in satisfaction scores were evaluated among dietitians in different roles. One-way ANOVA procedures determined overall satisfaction scores differed significantly across

the seven job titles of management dietitians, $F(6, 844) = 4.41, p < 0.001$. Post-hoc comparisons ($p \leq 0.05$) among the job title groups indicated that district managers ($M = 167.12 \pm 19.66$) and directors ($M = 158.85 \pm 27.46$) had significantly higher overall job satisfaction scores than clinical nutrition managers ($M = 150.11 \pm 25.12$). Significant differences for overall satisfaction scores were not found between the other groupings of managers.

Additional one-way ANOVA procedures were used to examine differences among satisfaction subscales among different manager groups. Significant differences were not found with the means scores of satisfaction with supervision, fringe benefits, operating conditions or communication. However, significant differences were found between manager groups for pay, promotion, rewards, coworkers, and nature of the work.

Mean overall job satisfaction scores compared across various levels of demographic and operational variables also indicated significant differences across levels of income $F(6, 825) = 5.159, p < 0.001$, budget responsibility $F(4, 836) = 4.811, p = 0.001$, and number of dietitians worked with on a routine basis $F(5, 837) = 3.181, p = 0.007$.

Intent to Leave Job

Research Question 3: What is the level of intention of management dietitians to leave their current jobs?

Mean scores for the item, “likelihood to look for another job in the next six months”, was 2.02 ± 1.28 for management dietitians while “likelihood to quit the job during the next six months”, was 1.54 ± 0.94 . Considering the five-point scale anchored (1) not at all likely to (5) extremely likely used, these results were interpreted as low intent to leave among management dietitians.

Hypothesis 1: Job satisfaction among registered dietitians in management roles will be negatively associated with intent to leave their current jobs.

Hypothesis one was supported. Pearson correlations were used to illustrate the association between job satisfaction subscales and overall intent to leave score. For management dietitians, the correlation between overall satisfaction and intent to leave was ($r = -0.477$). This is consistent among the well-established literature (Hellman, 1997; Mobley, 1977; Mobley et al., 1978). Among satisfaction subscales, the strongest significant correlations with intent to leave were contingent rewards ($r = -0.444$) and nature of the work ($r = -0.444$).

Although an examination of intent to leave prediction criteria was not part of the research questions or hypotheses, two regression models, one with all job facets and another with all job facets and job titles were performed. While both models were significant, there was no difference in the proportion of variance explained between the two. Therefore, the original regression model with only job satisfaction facets was used to also illustrate intent to leave.

The resulting model for management dietitians was significant ($F=35.439, p \leq .000$). Significant independent variables in the model were supervision ($\beta=-0.140, p \leq .000$), contingent rewards ($\beta=-0.169, p \leq .002$), and nature of work ($\beta = -0.275, p \leq .000$). The proportion of variance explained was ($R^2 = 0.28$).

Career Satisfaction

Research Question 2: What is the level of career satisfaction of registered dietitians in management roles?

Career satisfaction was measured with five items derived from related research with other occupations. The overall reliability estimate measured by Cronbach's alpha was 0.89 which

indicated strong internal consistency and reliability among the core career satisfaction items for this study.

Nearly all career satisfaction items measured neutral or higher for management dietitians. The highest mean score was success achieved in the career and the lowest mean score was satisfaction with income, $M = 3.63 \pm 1.13$. The mean overall career satisfaction score for management dietitians was $M = 19.82 \pm 3.73$, compared to non-management dietitians, $M = 16.44 \pm 5.06$. Overall career satisfaction scores were significantly different ($t = 6.907, p < 0.001$) between the two groups. Accordingly, each measure of career satisfaction was significantly lower for non-management dietitians.

A one-way ANOVA procedure was also used to test for significant differences in total career satisfaction scores among job titles of management dietitians. Overall satisfaction scores differed significantly across the seven groups of managers, $F(6, 839) = 5.69, p < 0.001$.

Post-hoc comparisons ($p \leq 0.05$) showed that district managers ($M = 22.00 \pm 2.73$) had significantly higher overall career satisfaction scores compared to managers ($M = 19.20 \pm 3.50$) and clinical nutrition managers ($M = 19.17 \pm 3.72$). Also, directors had significantly higher levels of overall career satisfaction ($M = 20.56 \pm 3.74$) compared to managers and clinical nutrition managers.

Additional one-way ANOVA procedures showed significant differences among different groups of managers for all individual career satisfaction items. Interestingly, clinical nutrition managers had significantly lower mean scores in every case of career satisfaction measurement when compared with at least one other group. Managers were significantly less satisfied with career success compared to district managers and directors. Managers were also less satisfied with goals for advancement compared to directors.

Differences in career satisfaction for management dietitians were examined across demographic and operational variables. Significant differences were found across levels of income $F(6, 820) = 8.504, p < 0.001$, budget responsibility $F(4, 832) = 9.992, p < 0.001$, and number of dietitians worked with on a routine basis $F(5, 832) = 3.82, p = 0.002$.

Professional identification was measured to help further assess elements of career satisfaction for dietitians. Management dietitians rated having sense of pride about the profession the highest (4.09 ± 0.86) and also found more value in maintaining the RD credential rather than maintaining ADA membership. Stone et al., (1981a) also reported high pride among entry-level dietitians nearly 30 years ago. Management dietitians rated all professional identification items significantly higher than non-management dietitians with the exception for the value of ADA membership and the RD credential which were rated similarly. Management dietitians rated additional professional identification items consistently neutral.

The majority of dietitians in this study were members of at least one professional organization. By percentage, management and non-management dietitians had memberships in a similar number of professional organizations and attended about the same number of professional meetings. Stone et al. (1981a) reported that 343 (87%) dietitians had attended a state professional meeting and the majority had memberships in two or more professional associations. In the present study, a large percentage of both management and non-management dietitians had not held an elected officer position in the last three years, 73.7% and 80.0% respectively.

Data transformations combined management dietitians into two groups; those who reported no attendance or elected officer positions and those who were involved or held officer positions. Independent samples t-tests showed no significant difference in overall career

satisfaction between those who were involved and those who were not involved for any of the dietetics-related professional activities.

Reichers (1985) described a model where conflict arises with professional involvement and identity. Conflict was described as differing goals or expectations between multiple constituencies which may cause conflict with the level of commitment towards their primary organization or employer. As such, job dissatisfaction and turnover can occur as a result of trying to identify with multiple professional entities rather than focusing on fewer. The results of this research seem to conflict to those reported by Sauer et al. (2007) who found that involvement was a key indicator of self-reported career success among dietitians. Likewise, Mortensen, Nyland, Fullmer and Eggnett (2002) found a high correlation between multiple levels of professional involvement and job satisfaction among dietitians.

Intent to Leave the Profession

Research Question 4: What is the level of intention of management dietitians to leave the profession?

Mean scores for the item, likelihood to look for another profession in the next two years, was 1.88 ± 1.07 for management dietitians and the mean score for the item, likelihood to leave the profession during the next two years was 1.76 ± 0.98 . Independent samples t-tests did not indicate significant differences of intent to leave mean scores between managers and non-managers. ANOVA procedures did not indicate significant differences in mean scores of intent to leave across different groups of management dietitians. The results were interpreted as low intent to leave the dietetics profession.

Hypothesis 2: Career satisfaction among registered dietitians in management roles will be negatively associated with intent to leave the dietetics profession.

Hypothesis 2 was supported. Pearson correlations were used to examine relationships between career satisfaction and intent to leave the profession. Item scores for the intent to leave measurement items were summed to form an overall intent to leave score for the purpose of correlation analysis. A significant negative correlation existed between overall career satisfaction and overall intent to leave for management dietitians. However, the relationship was less strong ($r = -0.276$) when compared to non-management dietitians ($r = -0.441$). Multiple regression procedures with the five career satisfaction independent variables and intent to leave the profession as the dependent variable did not produce a significant model or explain reasonable variance.

For the following research questions and hypotheses, additional results are referred to and presented in Appendix D as indicated since the previous chapters (4 and 5) discussed job and career satisfaction findings independently.

Research Question 5: What is the relationship between management dietitians' job and career satisfaction?

Research Question 6: What is the relationship between management dietitians' intention to leave their jobs and intention to leave the dietetics profession?

Whaley and Hosig (2000) reported that 88% of dietitians were generally satisfied with their jobs and 82% with the profession. That study however, included only male dietitians. The management dietitians in the present study were comprised of mostly females (96.1%) which is consistent with the demographics of the profession. Overall, results generally suggested satisfaction with both jobs and careers. By percentage, 540 (63.5%) management dietitians were

considered satisfied with their current job while 501 (58.9%) satisfied with their careers. Cross-tabulations revealed that 47.7% of the management dietitians who were considered satisfied with their jobs were also satisfied with their careers. Likewise, 18.9% who were neither satisfied nor dissatisfied with their jobs were still satisfied with their career and similarly, 16.5% who were neither satisfied nor dissatisfied with their careers were still satisfied with their jobs.

As discussed by Brady (1980), professionals' career satisfaction is often considered within the context of a job and level of satisfaction with a job. Collins et al. (2000) found that enhanced skills, autonomy and increased managerial responsibilities were reasons that nurses felt their careers had been enhanced and thus, the same respondents were statistically more likely to have higher job satisfaction. However, 25% also indicated they would leave their professional career if they could. Intent to leave was related to lack of career progression, financial rewards, stress and low morale (Collins et al., 2000).

In this research, the correlation between overall job satisfaction and career satisfaction was significantly different than zero ($r = 0.569, p \leq 0.001$). Additional multiple regression was used to predict the proportion of career satisfaction in terms of the job satisfaction facets. The resulting model was significant ($F=9.836, p \leq .000$) (Table 6.1). Significant independent variables in the model were pay ($\beta=0.265, p \leq .000$), promotion ($\beta=0.250, p \leq .002$), benefits ($\beta = 0.066, p \leq .028$) and nature of the work ($\beta = 0.279, p \leq 0.000$). The proportion of the variance was appreciable ($R^2 = 0.43$).

The implications of this data are important to the profession and its members since it appears that career satisfaction among management dietitians may be significantly and uniquely impacted by various elements of their jobs and job-related satisfaction. The regression model is

sensible given that variables likely to affect a dietitians' career would include pay, promotion, and nature of the work itself.

To best gain from these results, one may look at the opportunities that surfaced. As discussed previously, lack of satisfaction with pay has been a recurring topic of discussion for dietitians. Satisfaction with income was also the only measure in this study evaluated in terms of both job and career satisfaction. And when compared, although not dissatisfying, satisfaction with income was still the least satisfying element of career satisfaction and also among the least satisfying subscales of job satisfaction for management dietitians. For non-management dietitians, satisfaction with pay was significantly lower.

Skipper and Lewis (2006) also reported that a majority of clinicians forecasted that gaining a practice doctorate would lead to increased pay, career satisfaction, sense of accomplishment and respect from other healthcare professionals. In the present study, the correlation with pay satisfaction and intent to leave the job for non-management dietitians in this study was significantly different than zero ($r = -0.444$, $p < 0.001$). However, analysis of variance testing did not find significant differences with the pay satisfaction subscale, overall job satisfaction or career satisfaction across the levels of education for management dietitians. The implication is that for management dietitians, satisfaction with pay at both the job and career level are significantly related. However, satisfaction with income may have less to do with the level of education attained as compared to clinical practitioners.

In addition, only 49.7% of management dietitians who reported job pay satisfaction were also satisfied with meeting their goals for income at the career level. However, correlation analyses reported a strong significant relationship between pay at the job level and income at the current career stage (0.653 , $p < 0.001$). Whether satisfied or not with income, management

dietitians still seem to be expressing a degree of opportunity in terms of pay with regards to their current jobs and at their career stage. This could imply that dietitians may be forecasting satisfaction with pay in the future over time, with promotion, or with more experience. This could reflect negative views about goals with income that may never be met simply due to limitations of being in the dietetics profession.

Additional analyses were conducted to help bridge the interpretation of the relationships between job/career satisfaction and intent to leave for management dietitians. Dietitians were asked if they would choose dietetics again if they could start their careers over, and only 83 (9.8%) of management dietitians indicated they would definitely choose another profession. When recoded into groups who indicated they would definitely not choose dietetics again and those who said otherwise, independent samples t-tests revealed significantly higher levels of both overall job satisfaction ($t = -5.894, p < 0.001$) and overall career satisfaction ($t = -6.718, p < 0.001$) among those who would select dietetics again. Another 157 (18.5%) of management dietitians would probably not encourage a relative to go into the dietetics profession. It seems to reason that lack of satisfaction with some is strong enough that they would not pursue dietetics again. What is not known from this study is what professions might be considered more attractive and why.

Dietitians in this study did not report that it was likely they would look for different jobs or quit their jobs in the near future. Concurrently, it did not appear that most management dietitians would consider other professions or leave dietetics in the next two years. By percentage, only 42 (5.0%) of the management dietitians reported that it was likely or extremely likely they would quit their current jobs in the near future while only 59 (7%) management dietitians reported they would leave the profession in the next two years. Only 11 (26%) of the

respondents who reported it was likely or extremely likely they would quit their jobs also reported they planned to leave the profession. Comparatively, Whaly and Hosig (2000) reported that 68% of the male practitioners planned to remain in the dietetics profession.

Pearson correlation reiterated the relationship between intent to leave both the job and/or career with a moderate and significant association ($r = .415, p < 0.001$). Other combinations of intent to leave followed suit, with the correlation between job satisfaction and intent to leave the profession ($r = -.338, p < 0.001$), career satisfaction and intent to leave the job ($r = -.292, p < 0.001$), career satisfaction and intent to leave the profession ($r = -.276, p < 0.001$). From this, intent to leave/stay in jobs and intent to leave/stay in the profession share a significant relationship for management dietitians. Accordingly, the following hypotheses (3-6) were supported.

Hypothesis 3: Job satisfaction among registered dietitians in management roles will be negatively associated with intent to leave the dietetics profession.

Hypothesis 4: Career satisfaction among registered dietitians in management roles will be negatively associated with intent to leave their current jobs.

Hypothesis 5: Job satisfaction among registered dietitians in management roles will be positively associated with career satisfaction.

Hypothesis 6: Intent to leave current jobs among registered dietitians in management roles will be positively associated with intent to leave the profession.

The insight about job and career satisfaction in this study were obviously limited to the measures used, although an enormous set of factors could affect a dietitians' perception about their jobs and careers daily and over time. Given the exploratory nature of this study, 18 additional questions were used to assess attitudes about a variety of work and/or career related

factors that would affect most dietetics professionals. The statements were derived from the professional literature, discussions with professionals and personal experiences. Summaries of the mean scores for both management and non-management dietitians are illustrated in Table 6.2 (Appendix D). The attitudinal-based statements were anchored on a 7-point Likert scale anchored from (1) extremely negative to (7) extremely positive.

According to this phase of the research, the majority of items were considered positive to dietitians when considering the work they do. The most positive attribute for both management and non-management dietitians was technology in the workplace. For management dietitians, dealing with customers and employees, availability of vacation time, and opportunities were positive. Less positive attitude ratings were related to financial pressures and reimbursement for nutrition services. Significant differences in mean scores existed between management and non-management dietitians with the availability of vacation time, dealing with employees and diverse employees, opportunities for professional development, concern for the environment, level of respect for dietitians from others and strategic direction of the profession.

Finally, qualitative data was obtained which asked about current sources of satisfaction and dissatisfaction with the job and the career. The qualitative questions for management dietitians resulted in approximately 150 pages of open-ended comments which were reviewed for recurring themes. A general summary of themes derived from the comments of management dietitians are as follows:

Sources of Job Satisfaction

- Making a difference and helping others
- Autonomy and decision making
- Working on special projects
- Improving satisfaction/quality/sales
- Having a pay level above other RDs

Sources of Job Dissatisfaction

- Pay in terms of the profession or RDs reporting to them
- Respect and/or recognition for the job/position/RD credential
- Workplace politics
- Dealing with administration
- Dealing with Unions

Sources of Career Satisfaction

- Having multiple skills and thus, job security
- Variety and flexibility
- Networking
- Working in both a science and management field
- Working with students
- Working with both food and people

Sources of Career Dissatisfaction

- Pay (as compared to other management professionals)
- Pay given level of education
- Being limited by nature of dietetics and/or males

- Dealing with nurses
- Neglect of management in dietetics by ADA

Limitations

This study, like most others, had vulnerabilities. One limitation included the sample of dietitians selected for this study which only included members of specific dietetics practice groups (DPGs). This limits the ability to generalize the findings due to the lack of information gathered from those who are not members of ADA or certain DPGs. Since both ADA and DPG membership is voluntary, it is possible that a heightened sense of job and/or career satisfaction exists specifically among these members compared to those who are not ADA/DPG members.

This research did not significantly address non-response bias. It is possible those who did not respond felt more positive or negative about satisfaction or the other variables. Multiple attempts to contact non-respondents were made in order to delimit non-response bias including extension of the survey offering for one week longer than the pilot study.

An online survey instrument was used for this study. Dillman (2007) pointed out that some limitations exist with online survey methodologies. For example, sophistication with different technologies or differences in computer operating systems may limit some from receiving or responding to the survey instrument. In addition, an online survey can only reach those participants with access to a computer. There were two brief instances where the Axio survey system was not functioning properly during data collection, although this did not seem to hinder responses significantly and only one person contacted the researcher about the unavailability of the survey link. The few limitations inherent with using Internet-based survey methods were outweighed by the cost effectiveness and automation of collecting the large amount of information for this study.

Gathering information about job and career satisfaction could be sensitive to some participants. Although the methods used to distribute the survey instrument and to collect data maintained confidentiality and anonymity, requests for sensitive job-related information such as perceptions about pay, co-workers and supervisors, could have inhibited some responses. The measures used to maintain confidentiality and anonymity were reiterated to the participants throughout the data collection process.

Another limitation included the interpretation of job titles. Since job titles became the center point for a majority of the statistical comparisons, the data at this point was not analyzed in light of job titles and specific roles within specific work environments such as schools, long-term care, universities, corrections, and medical centers. It is suggested that future research specify more precisely the role and responsibilities of respondents, particularly of management dietitians.

The variables assessed and conclusions formed were limited to those specifically measured by the instruments used such as the JSS and career satisfaction. Other standardized measures were available that examine various factors of job and career satisfaction. This attempt to measure job and career satisfaction was a new starting point. Also, since the measurements in this study were gathered at one point in time, responses could have been altered by extremely high or low feelings about jobs or careers due to various circumstances during data collection phase. Accordingly, the variables most likely to be associated with satisfaction and/or dissatisfaction among professionals similar to management dietitians over a continuum of time were assessed.

Finally, due to the current global economic recession and historic unemployment rates across many occupations, caution is necessary with regards to the measurement and discussion of

intent to leave. Accordingly, dietitians are not immune to the effects of the recession both personally and at work. This existing reality limits the interpretation of intent to leave at this time.

Implications and Future Research

This study suggested an optimistic future with related research among dietitians. First, the response rate was higher compared to recent attempts to gather data among similar groups of dietitians (Pratt, Kwon, & Rew, 2005; Chima & Seher, 2007; Chao, Dwyer, Houser, Tennstedt, & Jacques, 2008). Also, the frequency of positive and encouraging emails shared with the researcher was much greater than anticipated. Many requests were made for summaries of the results and with additional comments about interest in the study. Several dietitians took the time to speak out and perhaps felt this process was helpful for them as they reflected about their work and careers. It is unsure how management dietitians who participated expect the results to turn out or if the level of peripheral interest suggested they expect less than desirable results. Regardless, the level of interest in this topic from managers was promising for future study. This bigger question from all this is, can job satisfaction among dietitians be improved from sharing the findings of this research?

The introductory chapter of this report indicated that clinical nutrition managers should not be neglected in the context of a study devoted to management dietitians. Ironically, it was the clinical nutrition managers who provided the largest response rate and the majority of significantly lower levels of satisfaction compared to other management dietitians. Obviously, something is going on in this group which justifies that more focused research should be conducted among this specialty and other sub-groups of managers.

Clinical dietitians in this study were significantly less satisfied than management dietitians in several areas. Clinical dietitians particularly expressed dissatisfaction with promotion. This is not new information. These results are cause for concern given comparisons to management dietitians. However, the results should also be interpreted with caution since it is difficult to generalize the results of this study to other non-managers given relatively small sample used. In addition, there are many different types of non-management dietitians in the field.

The insight gained is still intriguing in that two groups of dietitians with essentially the same credentials and initial academic training feel so differently about their jobs and careers. From this research we can suggest that there is something about being a manager as a dietitian that is more satisfying. More precise implications are generated when one assumes that most practicing clinical nutrition managers were probably promoted from a role as a clinical dietitian. Might this have something to do with the lower levels of satisfaction expressed by clinical nutrition managers compared to other management dietitians? The ADA should also seriously question if clinical dietitians view clinical management as a worthwhile endeavor or not.

This research gathered information about nine facets of job satisfaction, but there are numerous factors that can affect how someone feels about their job. Research instruments specific to dietetics practice would be useful. Qualitative research in the form of open-ended questions, focus groups and Delphi-studies could help generate standardized methods and instruments for future study.

Future research should build upon those elements that were found to be highly satisfying such as nature of the work, coworkers and supervision. Although management dietitians represent a smaller percentage of dietitians in practice, as a group they are very diverse in terms

of work locations and responsibilities. Future research should attempt to better pinpoint what it is about the nature of the work, coworkers and supervision among specific types of managers and within specific environments such as healthcare, schools, colleges or long-term care facilities. It is important that findings be communicated throughout the profession, particularly to the education sector. ADA should share these results with the administrative ranks and human resource professionals of these environments.

It is plausible that both undergraduate and graduate dietetics students enter and leave their academic programs with a very limited view of what management in dietetics really entails. Agriesti-Johnson and Broski (1982, p.558) cautioned “it is likely, that dietitians, while upgrading their educational and practice levels, are raising their job expectations as well. If these expectations are not met, they may feel cheated and therefore dissatisfied with their jobs.” It would be advantageous for ADA to disseminate information among dietetics students, interns, and prospective students about the level of satisfaction management dietitians have expressed in this study. This would help make this segment of the profession more attractive and supported in the future. It seems logical that the profession would want competent and satisfied dietitians capable of managing other dietitians and related services.

Attention also should be focused on determining the latent variables surrounding dissatisfying elements of work for dietitians. For example, satisfaction with pay for management dietitians was relatively neutral while operating conditions was rated lower. Further examination of the neutral and dissatisfying parts of work would be a step in the right direction to supporting practitioners.

It remains unknown if the performance of management dietitians is correlated with job or career satisfaction. It is also unknown if there are commonalities such as personality types or

other factors among dietitians that attract them to management practice which later may also affect levels of satisfaction. As this research continues, it will also be important to incorporate or adapt some of the more refined satisfaction models specific to areas of management practice.

Finally, ADA should support research of this nature to help develop career guidance systems. Currently, ADA supports continuing education initiatives and provides a wealth of information for practitioners at the job level. However, few support materials are available to dietitians contemplating a career move within or outside of dietetics practice. Dietitians have the potential to be promoted into higher ranking positions such as administration in healthcare, schools, universities and long-term care facilities, yet little support is provided on behalf of the association for such career moves, internally or externally of dietetics practice.

Following are specific research questions that support ADA's research priorities and the future of dietetics practice:

1. Who do RDs compare their level of pay to? What do RDs think is a fair amount of pay for the work they do? Is higher pay enough to consider a management position or another profession such as nursing?
2. What do RDs specifically like or dislike most about the nature of their work?
3. Do RDs want to promote, and if so, to what level? What resources do RDs think are helpful and/or missing relative to promotion? Do RDs have the skills and confidence to promote to higher-level positions within or outside of traditional dietetics practice?
4. How do professionals doing the same work as RDs feel about their jobs and careers? Are they more or less satisfied than their credentialed counterparts?

5. What do RDs who have left the profession have to say about dietetics, their jobs and what did they go on to do?
6. Are RDs supported when taking extended time away from their jobs or careers to raise a family? Are RDs supported when making job or career transitions while following a spouse or significant other?
7. What role does ADA want to have in supporting management practice and dietitians?

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**Appendix A - Invitation Letter Sent to Dietitians with Management
Responsibilities**

AXIO SURVEY

Job Satisfaction and Career Satisfaction of Management Dietitians

Survey Description

Dear Colleague:

You are invited to participate in a study designed to assess job and career satisfaction of management dietitians. This study is being conducted by Kevin Sauer, MS, RD, LD and Dr. Deborah Canter, RD, LD, and is sponsored by the Department of Hospitality Management and Dietetics at Kansas State University.

We realize that you have multiple demands on your schedule this time of year and appreciate your support of this research project. This study hopes to fill some of the existing gaps about what we know of job and career satisfaction of management dietitians. The questionnaire should take approximately 20 minutes or less to complete. Consent to participate will be understood by completion of all or part of the survey; however, your completion of the entire survey is appreciated.

There are no risks related to your participation, but the knowledge gained will benefit dietitians and the profession. Questions concerning your job and career will ask for personal information but the responses will be kept in strict confidence. In addition, no information will be shared that will reveal your identify or place of employment. The database of information gathered will be collapsed and analyzed as group data.

If you should have any questions or concerns please feel free to contact Dr. Deborah Canter, at (785)532-5507 or myself at (785)532-5581, email ksauer@ksu.edu. If you have any questions about the rights of individuals in this study or about the way it is conducted, you may contact the Kansas State University Research Compliance Office at (785) 532-3224. Your time and effort in assisting with this project is sincerely appreciated. An opportunity to be included in a drawing for a \$50 gift card is explained after submitting the survey.

Sincerely,

Kevin Sauer, MS, RD, LD
Doctoral Candidate
Department of Hospitality Management and Dietetics
Kansas State University

Deborah Canter, PhD, RD, LD
Professor and Head
Department of Hospitality Management and Dietetics
Kansas State University

Opening Instructions

When ready to continue, please proceed by selecting the next button.

**Appendix B - Survey Instrument for Dietitians with Management
Responsibilities**

Page 1

Question 1 *** required ***

In order to determine your selection for this study, please indicate the following:

Are you currently employed as a dietitian with supervisory responsibilities?

- Yes
- No

Page 2

Fill out this page only if you answered:

- *No* on question [1. Are you currently employed as a&nb.. on page 1](#) .

Thank you for your time. Unfortunately, you do not qualify.

empty page

Page 3

Fill out this page only if you answered:

- *Yes* on question [1. Are you currently employed as a&nb.. on page 1](#) .

Question 2

The following section pertains to how you feel about your current job. For each of the following items, select the response which best represents your current level of job satisfaction. Please consider how you feel about your job on most days.

Question 3

1 - Very Much Disagree | 2 - Moderately Disagree
3 - Disagree Slightly | 4 - Agree Slightly | 5 - Agree Moderately | 6 - Very Much Agree

| | 1 | 2 | 3 | 4 | 5 | 6 |
|-----------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 3.1 I feel I am being paid a fair amount for the work I do. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.2 There is too little chance for promotion in my job. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.3 My supervisor is competent in doing his/her job. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.4 I am not satisfied with the benefits I receive. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.5 When I do a good job, I receive the recognition for it that I should receive. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.6 Many of our rules and procedures make doing a good job difficult. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.7 I like the people I work with. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.8 I sometimes feel my job is meaningless. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | |
|--------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 3.9 Communications seem good within this organization. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.10 Raises are too few and far between. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.11 Those who do well on the job stand a fair chance of being promoted. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3.12 My supervisor is unfair to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Page 4

Fill out this page only if you answered:

- Yes on question 1. *Are you currently employed as a&nb..* on page 1 .

Question 3

The following section also pertains to how you feel about your current job. For each of the following items, select the response which best represents your current level of job satisfaction. Please consider how you feel about your job on most days.

Question 4

1 - Very Much Disagree | 2 - Moderately Disagree
3 - Disagree Slightly | 4 - Agree Slightly | 5 - Agree Moderately | 6 - Very Much Agree

| | 1 | 2 | 3 | 4 | 5 | 6 |
|-----------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 4.1 The benefits we receive are as good as most other organizations offer. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.2 I do not feel that the work I do is appreciated. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.3 My efforts to do a good job are seldom blocked by red tape. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.4 I find I have to work harder at my job because of the incompetence of people I work with. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.5 I like doing the things I do at work. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.6 The goals of this organization are not clear to me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.7 People get ahead as fast here as they do in other places. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.8 I feel unappreciated by the organization when I think about what they pay me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.9 My supervisor shows too little interest in the feelings of subordinates. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.10 The benefits package we have is equitable. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4.11 There are few rewards for those who work here. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 4.12 I have too much to do at work. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|

Page 5

Fill out this page only if you answered:

- Yes on question 1. *Are you currently employed as a&nb.. on page 1 .*

Question 4

The following section also pertains to how you feel about your current job. For each of the following items, select the response which best represents your current level of job satisfaction. Please consider how you feel about your job on most days.

Question 5

1 - Very Much Disagree | 2 - Moderately Disagree
 3 - Disagree Slightly | 4 - Agree Slightly | 5 - Agree Moderately | 6 - Very Much Agree

| | 1 | 2 | 3 | 4 | 5 | 6 |
|-----------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 5.1 I enjoy my coworkers. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.2 I often feel that I do not know what is going on with the organization. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.3 I feel a sense of pride in doing my job. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.4 I feel satisfied with my chances for salary increases. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.5 There are benefits we do not have which we should have. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.6 I like my supervisor. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.7 I have too much paperwork. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.8 I don't feel my efforts are rewarded the way they should be. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.9 I am satisfied with my chances for promotion. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.10 There is too much bickering and fighting at work. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.11 My job is enjoyable. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.12 Work assignments are not fully explained. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Question 6

For each of the following items, please select the response which best represents your feelings about leaving your current job.

Question 7

1 - Not at all Likely | 2 - Not Likely | 3 - Neutral | 4 - Likely
5 - Extremely Likely

| | 1 | 2 | 3 | 4 | 5 |
|--------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 7.1 How likely is it that you could find a good job if you were to leave your present job? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.2 How likely is it that you will look for another job during the next six months? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.3 How likely is it that you will quit your job during the next six months? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Page 6

Fill out this page only if you answered:

- [Yes](#) on question 1. [Are you currently employed as a&nb..](#) on [page 1](#) .

Question 6

The following section pertains to how you currently feel about your career in dietetics. For each of the following items, please select the response which best represents your level of career satisfaction.

Question 7

1 - Strongly Disagree | 2 - Disagree | 3 - Neutral | 4 - Agree
5 - Strongly Agree

| | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 7.1 I am satisfied with the success I have achieved in my career. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.2 I am satisfied with the progress I have made toward meeting my overall career goals. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.3 I am satisfied with the progress I have made toward meeting my goals for income. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.4 I am satisfied with the progress I have made toward meeting my goals for advancement. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.5 I am satisfied with the progress I have made toward meeting my goals for the development of new skills. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

For each of the following items, please select the response which best represents your feelings about leaving the dietetics profession.

Question 9

1 - Not at all Likely | 2 - Not Likely | 3 - Neutral | 4 - Likely
5 - Extremely Likely

| | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 9.1 How likely is it you could find another profession if you were to leave the dietetics profession? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.2 How likely is it that you will look for another profession in the next two years? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.3 How likely is it that you will leave the dietetics profession in the next two years? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.4 How likely is it that you will discontinue your ADA membership in the next two years? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.5 How likely is it that you will discontinue your RD credential in the next two years? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Page 7

Fill out this page only if you answered:

- **Yes** on question 1. *Are you currently employed as a&nb..* on *page 1* .

Question 8

For each of the following items, select the response which best represents your current opinions about the dietetics profession.

Question 9

1 - Strongly Disagree | 2 - Disagree | 3 - Neutral | 4 - Agree
5 - Strongly Agree

| | 1 | 2 | 3 | 4 | 5 |
|----------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 9.1 I identify strongly with my profession. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.2 My chosen profession gives me a sense of well-being. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 9.3 I get a sense of pride from my profession. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.4 If I were to describe myself to someone, I would probably begin by stating my profession. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.5 If I were to rank in importance to me all the things that I do, those things related to my work would be at or near the top. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.6 I find value in maintaining my ADA membership. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.7 I find value in maintaining my RD credential. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Question 10

1 - I often agree with the criticism | 2 - It does not bother me
3 - It makes me a little angry | 4 - It makes me angry most of the time
5 - It makes me quite angry

| | | | | | |
|-----------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 | 2 | 3 | 4 | 5 |
| 10.1 How do you feel when you hear someone outside of the profession criticizing the field? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10.2 How do you react when you hear other dietitians criticizing the profession of dietetics? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Question 11

1 - Never | 2 - Once every few months | 3 - About once a month
4 - Several times a month | 5 - Once a week or more | 6 - Almost daily

| | | | | | | |
|----------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 11.1 In general, how often do you tell someone in your immediate family about the things concerning your profession? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11.2 In general, how often do you tell your friends and acquaintances about the things concerning your profession? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Question 12

1 - Definitely would choose another profession
2 - Probably would choose another profession | 3 - Undecided | 4 - Probably would choose dietetics
5 - Definitely would choose dietetics

| | | | | | |
|-------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 | 2 | 3 | 4 | 5 |
| 12.1 If you could begin your career over again, how likely would you be to choose the dietetics profession again? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Question 13

1 - Definitely would advise against it
2 - Probably would advise against it | 3 - Would neither encourage or discourage it

4 - Probably would encourage it | 5 - Definitely would encourage it

| | 1 | 2 | 3 | 4 | 5 |
|----------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 13.1 How would you advise a relative who is considering going into the dietetics profession? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Page 8

Fill out this page only if you answered:

- **Yes** on question **1. Are you currently employed as a&nb..** on **page 1** .

Question 13

Please consider the dietetics-related professional organizations in which you currently hold memberships and meetings you have attended.

Question 14

In how many dietetics-related professional organizations or associations do you currently hold membership?

Characters Remaining: 2

Question 15

How many local, state, or district meetings of the dietetics-related professional organizations to which you belong have you attended in the past three years?

Characters Remaining: 2

Question 16

How many national conferences of the dietetics-related professional associations to which you belong have you attended in the past three years?

Characters Remaining: 2

Question 17

How many elected officer positions in dietetics-related associations have you held in the past three years?

Characters Remaining: 2

Fill out this page only if you answered:

- **Yes** on question [1. Are you currently employed as a&nb..](#) on [page 1](#) .

Question 17

Please review the following factors. Using the scale, when you think about your work, how do each of the following make you feel?

Question 18

1 - Extremely Negative | 2 - Generally Negative
3 - Slightly Negative | 4 - Neutral | 5 - Slightly Positive | 6 - Generally Positive
7 - Extremely Positive

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 18.1 Technology in the workplace | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.2 Regulations and accreditation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.3 Dealing with customers | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.4 Meeting the demands of diverse customers/clients/patients (demographics including age, gender, ethnicity, race, economic status, etc.) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.5 Dealing with employees | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.6 Meeting needs/demands of diverse employees (demographics including age, gender, ethnicity, race, economic status.) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.7 Employer expectations for work performance | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.8 Availability of vacation time | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.9 Ability to use vacation time | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.10 Financial pressures at work | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.11 Level of respect for dietitians from others | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.12 Opportunities for professional development | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.13 Sustainability and concern for the environment | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.14 Nutrition-related issues facing Americans | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.15 Reimbursement for services | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.16 Strategic direction of the dietetics profession | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.17 Safety of the food supply (food safety, bioterrorism issues) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18.18 Research in food and nutrition | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Question 19

What are the major sources of satisfaction that you encounter in your primary job?

Characters Remaining: 500

Question 20

What are the major sources of dissatisfaction that you encounter in your primary job?

Characters Remaining: 500

Question 21

What other factors have enhanced satisfaction with your **career** in dietetics?

Demographic and Background Information

Question 23

How many years of dietetics-related experience do you have?

- Less than 3 years
- 3 to 10 years
- 11 to 15 years
- 16 to 25 years
- Over 25 years

Question 24

Have you worked continuously since you entered the dietetics profession?

If no, please list the reasons for employment interruptions.

- Yes
- No

Further comments about your response:

Question 25

Have you worked outside of dietetics since entering the dietetics profession?

If yes, please list the areas and reasons for working outside of dietetics.

- Yes
- No

Further comments about your response:

Question 26

While working in dietetics practice, how many years have you had management responsibilities?

Characters Remaining: 2

Question 27

How many years have you had your present job?

- Less than 3 years
- 3 to 10 years
- 11 to 15 years
- 16 to 25 years
- Over 25 years

Question 28

Do you plan to retire in the next 3 years?

- Yes
- No
- Maybe

Question 29

What is your primary place of employment?

- Hospital or Medical Center
- Other Health Care Facility
- Commercial/Industry Setting
- College or University
- K-12 School
- Long-term Care Facility
- Government or Military Setting
- Other

Further comments about your response:

Question 30

In which of the following locations do you work?

- Rural (<2,500)
- Suburban (2,500 - 50,000)
- Small metropolitan (50,001 - 500,000)
- Medium metropolitan (500,001 - 1 million)
- Large metropolitan (> 1 million)

Further comments about your response:

Question 31

What is your current job title?

Characters Remaining: 50

Question 32

Are you responsible for multiple departments?

If yes, please list the departments for which you are responsible.

- Yes
- No

Further comments about your response:

Question 33

What is the average number of hours you work per week?

Characters Remaining: 2

Question 34

Is your primary supervisor a Registered Dietitian?

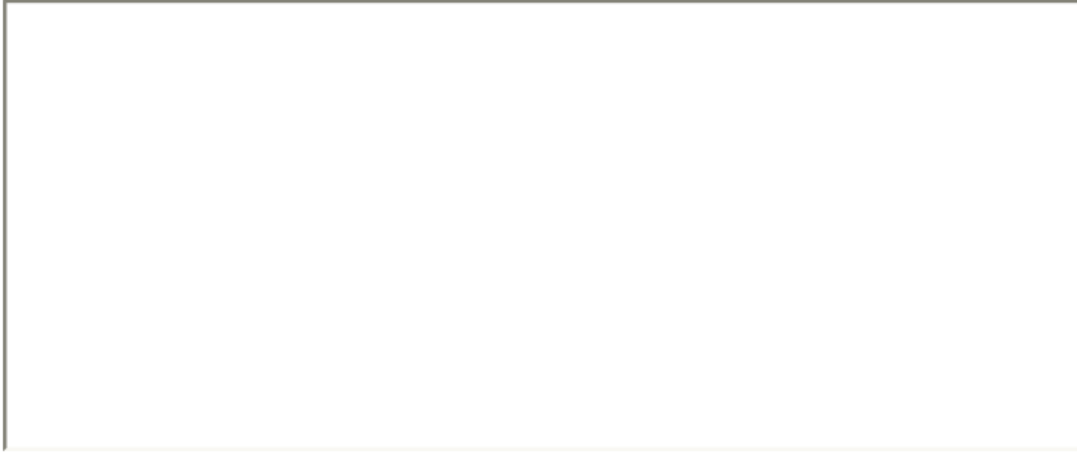
- Yes
- No
- Not applicable

Question 35

Which of the following best describes your employer?

- Contract Management Company
- Self-Operated Organization
- Self-Employed

Further comments about your response:



Question 36

How many dietitians do you work with on a routine basis in your primary work setting?

- No dietitians
- 1 to 3 dietitians
- 4 to 10 dietitians
- 11 to 15 dietitians
- 16 to 25 dietitians
- Over 25 dietitians

Question 37

What is your level of budget responsibility?

- No budget responsibility
- \$1K - \$99K
- \$100K - \$499K
- \$500K - \$999K
- > \$1 million

Question 38

How many employees report directly to you?

- No employees
- 1 - 9 employees
- 10 - 19 employees
- 20 - 29 employees
- 30 - 49 employees
- > 50 employees

Question 39

Please indicate your current employment status:

- Full-time (32 or more hours per week)
- Part-time (less than 32 hours per week)

Question 40

What is your age?

- under 19

- 20 - 29
- 30 - 39
- 40 - 49
- 50 - 59
- over 60

Question 41

What is your current annual income (pre-tax)?

- Under \$19,000
- \$20,000 - \$29,000
- \$30,000 - \$39,000
- \$40,000 - \$49,000
- \$50,000 - \$59,000
- \$60,000 - \$69,000
- \$70,000 or greater

age 11

Fill out this page only if you answered:

- [Yes](#) on question [1. Are you currently employed as a&nb..](#) on [page 1](#) .

Question 41

Demographic and Background Information cont.

Question 42

Please indicate your relationship status:

- Single
- Married
- Living with partner
- Divorced
- Widowed
- Other

Question 43

Please indicate the number of children you have:

Characters Remaining: 2

Question 44

Please indicate your ethnicity:

- Caucasian

- African-American
- Native American
- Asian/Pacific Islander
- Hispanic
- Other

Further comments about your response:

Question 45

Please indicate:

- Male
- Female

Question 46

What is your highest level of education?

- Associates Degree
- Baccalaureate Degree
- Some graduate coursework completed
- Master's Degree
- Doctoral Degree

Question 47

Please indicate your registration status:

- Registered
- Not registered
- Dietetic Technician, Registered

Question 48

What was your route to registration?

- Post baccalaureate dietetic internship
- Coordinated program in dietetics
- Master's degree plus experience
- Traineeship
- Other

Closing Message

Thank you for your assistance.

If you would like to be included in a drawing for a \$50 gift card to a common retailer of your choice, please send a separate email with your contact information to ksauer@ksu.edu

Appendix C - IRB Approval



University Research
Compliance Office
203 Fairchild Hall
Lower Mezzanine
Manhattan, KS 66506-1103
785-532-3224
Fax: 785-532-3278
<http://urco.ksu.edu>

TO: Deborah Canter
Hospitality Management and Dietetics
104 Justin

Proposal Number: 4901

FROM: Rick Scheidt, Chair 
Committee on Research Involving Human Subjects

DATE: November 21, 2008

RE: Proposal Entitled, "Job Satisfaction and Career Satisfaction of Management Dietitians"

The Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is exempt from further review.

This exemption applies only to the proposal currently on file with the IRB. Any change affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Exemption from review does not release the investigator from statutory responsibility for obtaining the informed consent of subjects or their authorized representatives, as appropriate, either orally or in writing, prior to involving the subjects in research. The general requirements for informed consent and for its documentation are set forth in the Federal Policy for the Protection of Human Subjects, 45 CFR 46.116-117, copies of which are available in the University Research Compliance Office and online at <http://ohrp.osophs.dhhs.gov/humansubjects/guidance/45cfr46.htm#46.116>. In cases of remote oral data collection, as in telephone interviews, oral consent is sufficient and the researcher is required to provide the respondent with a copy of the consent statement only if the respondent requests one. The researcher must, however, ask the respondent whether he or she wishes to have a copy. The initiative in requesting a copy must not be left to the respondent. Regardless of whether the informed consent is written or oral, the investigator must keep a written record of the informed consent statement, not merely of the fact that it was presented, and must save this documentation for 3 years after completing the research.

The identification of a human subject in any publication constitutes an invasion of privacy and requires a separate informed consent.

Injuries or any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.

Appendix D - Additional Tables

Table 6.1: Comparison of Attitudes about Factors in Professional Practice between Management and Non-Management Dietitians

| | Mean ± Standard Deviation | | t | Sig. |
|-------------------------------------------------|---------------------------|-------------------------|--------|--------|
| | Managers (n=851) | Non-Managers (n=115) | | |
| Technology in the workplace | 5.83±1.25 | 5.66±1.20 | 1.380 | 0.170 |
| Dealing with customers | 5.70±1.02 | 5.52±1.18 | 1.560 | 0.121 |
| Meeting needs/demands of diverse customers | 5.53±1.07 | 5.43±1.16 | 0.904 | 0.367 |
| Availability of vacation time | 5.63±1.44 | 4.98±1.70 | 3.925 | 0.000* |
| Employer expectations for work performance | 5.22±1.28 | 4.95±1.46 | 1.911 | 0.058 |
| Dealing with needs/demands of diverse employees | 5.21±1.22 | 4.76±1.17 | 3.929 | 0.000* |
| Opportunities for professional development | 5.14±1.43 | 4.46±1.77 | 3.915 | 0.000* |
| Dealing with employees | 5.09±1.38 | 4.72±1.27 | 2.920 | 0.004* |
| Ability to use vacation time | 5.08±1.72 | 4.63±1.73 | 2.653 | 0.009* |
| Regulations and accreditation | 4.83±1.44 | 4.76±1.31 | 0.529 | 0.597 |
| Sustainability and concern for the environment | 4.82±1.33 | 4.52±1.39 | 2.201 | 0.029* |
| Research in food and nutrition | 4.72±1.17 | 4.83±1.15 | -1.038 | 0.301 |
| Nutrition-related issues facing Americans | 4.68±1.36 | 4.56±1.48 | 0.845 | 0.399 |
| Level of respect for dietitians from others | 4.68±1.62 | 4.10±1.88 | 3.156 | 0.002* |
| Strategic direction of the dietetics profession | 4.46±1.37 | 4.10±1.59 | 2.278 | 0.024* |
| Safety of the food supply | 4.33±1.37 | 4.32±1.23 | 0.097 | 0.923 |
| Financial pressures at work | 3.83±1.57 | 3.60±1.39 | 1.609 | 0.110 |
| Reimbursement for services | 3.69±1.55 | 3.39±1.56 | 1.926 | 0.056 |

Scale values range from Extremely Negative (1) to Extremely Positive (7).

*p ≤ 0.05

Table 6.2: The Regression of Job Satisfaction Facets on Career Satisfaction for Management Dietitians

| | Model | Sum of Squares | df | Mean Square | F | Significance |
|---|--------------|-----------------------|-----------|--------------------|----------|---------------------|
| 1 | Regression | 5007.936 | 9 | 556.436 | 68.717 | .000 |
| | Residual | 6769.479 | 836 | 8.097 | | |
| | Total | 11777.404 | 845 | | | |

| Standardized Coefficients | | | | |
|----------------------------------|----------------------|-------------|----------|-------------|
| | Model | Beta | t | Sig. |
| 1 | (Constant) | | 10.167 | .000 |
| | Pay | .265 | 7.309 | .000 |
| | Promotion | .250 | 7.529 | .000 |
| | Supervision | -.045 | -1.282 | .200 |
| | Fringe Benefits | .066 | 2.208 | .028 |
| | Contingent Rewards | .084 | 1.741 | .082 |
| | Operating Conditions | -.019 | -.628 | .530 |
| | Coworkers | -.014 | -.393 | .694 |
| | Nature of Work | .279 | 8.291 | .000 |
| | Communication | -.053 | -1.434 | .152 |