

EVALUATION OF DIETETIC INTERNSHIP DIRECTORS' EXPECTATIONS OF INTERNSHIP
APPLICANTS: CRITERIA ASSOCIATED WITH A SUCCESSFUL INTERNSHIP MATCH

by

Candice D. Jackson, RD, LDN

A Thesis Submitted in Partial Fulfillment of the Requirements for
the Degree of Master of Science in Human Sciences

Middle Tennessee State University
2013

Thesis Committee:

Lisa Sheehan-Smith, EdD, RD, LDN, Chair

Janet Colson, PhD, RD

Thomas Brinthaup, PhD

ABSTRACT

The dietetics profession is a growing field with an influx of students applying to dietetic internships. While the number of applicants has risen dramatically, the number of internship positions has not proportionally increased leading to a match rate of 50%. The purpose of this study is to determine the most important selection criteria according to dietetic internship directors to maximize students' ability to match to an internship.

This descriptive study included a 13-item questionnaire developed to gauge what selection criteria dietetic internship directors consider most important. A total of 90 internship directors completed the survey and were included in the analysis. It was found that the most important selection criteria included Didactic Program in Dietetics grade point average (DPD GPA), total GPA, interview skills, and work experience. The internship match process is extremely competitive, and the students with the highest GPAs and greatest number of years or largest variety of work experience are the most likely to match to an internship according to internship directors' expectations for applicants.

TABLE OF CONTENTS

	Page
CHAPTER ONE: INTRODUCTION.....	1
Rationale.....	1
Statement of Research Questions	3
Assumption	3
Definition of Terms	4
CHAPTER TWO: REVIEW OF THE LITERATURE	5
History of the Dietetics Profession.....	5
Important Selection Criteria	7
CHAPTER THREE: METHODS	10
Introduction.....	10
Participants/Sample	10
Survey Instrument	11
Statistical Analysis	11
CHAPTER FOUR: RESULTS	15
CHAPTER FIVE: DISCUSSION AND CONCLUSION.....	22
Limitations	24
Recommendations for Future Research	24
Conclusions.....	25
REFERENCES.....	26
APPENDICES.....	29
APPENDIX A: EMAIL TO PARTICIPANTS	30

APPENDIX B: IRB APPROVAL.....	31
APPENDIX C: SURVEY TOOL	32

LIST OF TABLES

	Page
TABLE 1: RANKING OF SELECTION CRITERIA BY DIETETIC INTERNSHIP DIRECTORS.....	16
TABLE 2: PREDICTORS FOR SUCCEEDING IN AN INTERNSHIP PROGRAM.....	18
TABLE 3: PREDICTORS FOR PASSING THE REGISTRATION EXAM ON THE FIRST ATTEMPT.....	19
TABLE 4: GPA RANGE OF STUDENTS ACCEPTED TO A DIETETIC INTERNSHIP...	20

CHAPTER I: INTRODUCTION

Rationale

The dietetics profession was founded over a century ago, and the Academy of Nutrition and Dietetics (formally known as the American Dietetic Association) was formed in 1917 (1) by a group of women with the desire to “benefit as many as possible (2).” Dietetics has evolved over the years with the progress of nutritional science. This progression has expanded career options as well as the nation’s focus on health and wellness (1).

With the expansion of the dietetics profession and the variety of career options, there has been a corresponding increase in students choosing to enter this field. However, as a larger number of applicants apply each year, the availability of positions in supervised practice programs (SPP, also known as dietetic internships) has failed to increase in conjunction leading to a large number of students who are unable to secure placement with a dietetic internship (3). In order to become a registered dietitian, students must complete 1200 hours of supervised practice following the attainment of a bachelor’s degree from a university or college approved by the Accreditation Council for Education in Nutrition and Dietetics (ACEND, formally known as the Commission on Accreditation for Dietetics Education) (4). Because of the large number of undergraduate students applying for a relatively small number of internships, internship directors are able to choose only the most qualified applicants. In the April 2012 matching process, of the 4,585 applicants, 2,272 students or 50% were not matched to

an internship (3). In order to increase a student's chance of matching to an internship, it is imperative to know what qualities internship directors look for when choosing an applicant.

The research regarding placement in an SPP (5) and selection criteria deemed most important by internship directors (6,7) is outdated. There is a need for new research to determine changes in attitudes of internship directors and the selection criteria used to rank dietetic internship applicants. The most recent study according to this researcher was published in 2001 and determined reasons for students' inability to match with an SPP (5). This study alluded to didactic program in dietetics (DPD) directors' frustration in the little part they play in rectifying the situation (5). While the Commission on Dietetic Registration has also gathered data regarding characteristics that make competitive applicants, the information was gathered from a small number of applicants. The small sample size produces uncertainty over the representativeness and stability of the results. The results of these studies and the lack of additional research indicate a need for further exploration into dietetic internship directors' perceptions of an excellent candidate and the reasons behind those choices.

The purposes of this study are: 1) to determine the most important attributes an undergraduate dietetic student should possess for a successful internship match according to internship directors; 2) to identify the average minimum grade point average cutoff of successful applicants; and 3) to identify strategies to increase a student's chance of matching with a dietetic internship. In the 2012 Applicant Guide to Supervised Practice, the selection criteria, grade point average (GPA), graduate record

exam (GRE) scores, volunteer experience, personal statement, DPD GPA, science GPA, work experience, references, and interview are ranked in order of importance by each internship director. The ranking of these items provides insight into the qualities internship directors consider most important. To enhance understanding of their choices, this study also seeks to determine the reasons items are ranked in a particular order.

Statement of Research Questions

1. Using the selection criteria identified in the 2012 Applicant Guide to Supervised Practice, what items are considered most important according to internship directors?
2. What is the minimum total, DPD, and science grade point average internship directors accepted from their current internship class?
3. What are the reasons an applicant will fail to match with a dietetic internship?
4. How can dietetic internship applicants improve their chances of being matched to an internship?

Assumption

Internship directors use a quantitative method for choosing applicants based on their performance in the selection criteria areas.

Definition of Terms

Dietetics- “The science or art of applying the principles of nutrition to the diet (8).”

The Academy- The Academy of Nutrition and Dietetics is a professional organization comprised of food and health professionals (9).

ACEND- The Accreditation Council for Education in Nutrition and Dietetics is the “Academy of Nutrition and Dietetics’ accrediting agency for education programs preparing students for careers as registered dietitians (RD) or dietetic technicians, registered (DTR) (10).”

GPA- Grade point average

GRE- Graduate Record Exam is a graduate admissions examination used by thousands of graduate and business schools (11).

DPD- Didactic Program in Dietetics is an ACEND accredited program that “provides the required dietetics coursework leading to a bachelor’s or graduate degree (12).”

SPP- Supervised Practice Programs (also known as dietetic internships) must provide at least 1200 hours of supervised practice which can be completed in 8-24 months (13).

Coordinated Undergraduate Programs- An ACEND accredited program that “provides the required dietetics coursework and at least 1200 hours of supervised practice within an academic program leading to a bachelor’s or graduate degree (14).”

CHAPTER II: REVIEW OF THE LITERATURE

History of the Dietetics Profession

The profession of dietetics was founded by innovative women who were employed by the few hospitals that saw the benefit of nutrition in disease prevention in the early 1900's (15). When the Academy was formed in 1917, 100 women traveled from 21 different states and Canada to convene in Cleveland, Ohio for the first meeting to discuss issues of the dietetics profession (16). These women traveled long distances at a time when trips were usually made by train or bus, and it was uncommon for a woman to travel alone (16).

One of the speakers at the convention, Lulu Graves, who would later become the first President of the Academy, pointed out the need for dietitians to have training in the field of science and the importance of collaborating with physicians to prevent disease. However, it was not until 1924 that the first recommendations for the education of student dietitians were suggested (15, 17). The recommendations included a 4-year education at a university with a major in foods and nutrition followed by 6 months of practical experience that covered administrative, therapeutic, and social-service work (15, 17). In 1927, the Academy approved the education recommendations and standardized supervised practice experiences which are now known as dietetic internships (15, 17).

As dietetic internships grew in popularity, Martha Nelson Lewis aided in the improvement of programs by offering an integral Master of Science degree in 1942 (17).

The programs gained further advancement in 1966 when Ohio State University incorporated “the academic and experience requirements of dietitians into a 4-year curriculum (17).” These are now known as Coordinated Undergraduate Programs, and they are still used today (17).

Education requirements for dietetic students still remain the same. A student must obtain a minimum of a bachelor’s degree and complete the DPD requirements at a university that has been accredited by ACEND. The student will then participate in a dietetic internship which provides a minimum of 1200 hours of supervised practice (4). After completion of a dietetic internship, the student will be eligible to take a national examination which is administered by the Commission on Dietetic Registration (CDR). Passing the examination will allow the person to be credentialed as a registered dietitian, and they will need to complete continuing educational professional requirements to maintain their registration (4).

During the senior year of a dietetic student’s education, they can begin researching dietetic internships that fit their goals. The student can choose to apply to a variety of internships and decide whether relocation is an option. If the student wishes to gain a higher degree, many programs offer a Master’s Degree or some graduate credit in combination with the supervised experience. Dietetic internships also vary in the areas of specialization, length, and the experiences offered.

Career opportunities for dietitians have drastically expanded over the years to include clinical, community, management, consultant, and even business-related jobs involving marketing and advertising. According to the Bureau of Labor Statistics (BLS),

the field of dietetics is expected to grow at an average rate with a nine percent increase in the amount of jobs available between 2008 and 2018 (18). The most desirable jobs will be offered to candidates with advanced degrees or specializations (18).

Since job opportunities for dietitians have continued to expand over the years, the popularity of the profession has increased. According to the Academy, the demand for dietetic internships has drastically risen since 2003, and while there has been a 10% increase in the number of dietetic internship positions since 2011, demand continues to rise leading to a match rate that remains at 50%. During the April 2012 matching process, of the 4,585 applicants, 50% were not matched to a dietetic internship (3). This allows internship directors to choose only the most qualified applicants, and qualified applicants can fail to secure placement due to the influx of applicants with higher qualifications. In order to increase a student's chances of being matched to an internship, it is important for a student to know what selection criteria internship directors find most important and work to make those items stand out.

Important Selection Criteria

Research regarding a student's ability to match with dietetic internships and selection criteria deemed most important by internship directors is limited and outdated. However, the most recent research according to this researcher included a survey of 128 Didactic Program in Dietetics (DPD) directors. Parham, Robinson, and Quinn looked at dietetic students' failure to match to an internship, how failure to match would affect the program, ways to increase the chance of students matching to an internship, and how to limit negative effects when they are not matched. They found

the majority of directors agreed that “requiring extensive work experience and coaching in the preparation of internship applications” would allow more students to match with a Supervised Practice Program (5). The survey also showed that 59% of DPD directors agreed that students should be required to maintain a certain GPA to stay in the program but were against the idea of limiting admission to the program to students most likely to succeed as this would result in low enrollment rates (5). For students who do not secure placement with an SPP, directors agreed that the best options were to reapply after working or attending graduate school to increase future chances of matching to an internship (5).

The survey also conveyed the need for students to realize what qualities internship directors are looking for when choosing applicants and the need to coach students in order to prepare strong applications. While this will allow certain programs to produce more competitive applicants, it will not change the low proportion of students matched to an internship nationally (5).

In the ACEND 2009 annual report, data were collected on students participating in the 2009 fall dietetic internship match. Of the 590 students participating in the fall match, 189 were matched to an internship with 175 being placed with their first choice. By comparing certain selection criteria, the researchers found GPA to be the greatest determining factor in a student’s ability to match with an internship with 66% of students with a 3.6- 4.0 overall GPA and 61% with a 3.6 – 4.0 DPD GPA matching to an internship. They also found students with a Master’s degree or some graduate credits to have an increased likelihood of matching to an internship. While this report provides

valuable insight into selection of dietetic interns, the data were gathered from a small number of applicants, and results may not remain the same with data from a larger pool.

ACEND's 2009 annual report also included data on graduate outcomes from 2003-2008 (19). The number of graduates in Didactic Program in Dietetics has increased from 3206 in 2003 to 4996 in 2008 confirming the rise in the popularity of the profession. In 2008, 13.6% of graduates did not apply to internships because of the lack of desire to become an RD. An increasing trend can be seen in the number of students who are choosing to pursue additional education after applying to an internship and not receiving a match with 1.2% in 2003 and 3.5% in 2008 (19).

Other research regarding this topic is over 20 years old indicating a need for more recent research (6, 7, 20). The number of students applying to supervised practice programs has drastically risen since 2000 giving internship directors a greater selection of applicants and the ability to choose only the most qualified applicants (3). This increases expectations of students applying to dietetic internships which indicate a possible change in what internship directors are looking for. Since internship directors have increased applicant qualification expectations, additional research needs to be done to determine the main, current qualifications preferred by directors. This study seeks to determine the perceptions of internship directors on the most important selection criteria and the reasons behind choosing them.

CHAPTER III: METHODS

Introduction

The purpose of this descriptive study is to determine the most important selection criteria used to rank dietetic interns in the selection process. The ranking criteria used includes the nine items listed in the 2012-2013 Applicant Guide to Supervised Practice which are total, DPD, and science GPA, volunteer experience, work experience, personal statement, references, interview, and GRE score (21). An additional selection criteria item, university's academic reputation, was added by the researcher to determine internship directors' perceptions regarding the quality of a student's education. By surveying dietetic internship directors, a consensus of the top selection items was determined to aid future dietetic internship applicants in the application process. The qualitative portion of this research determined the reasons students are unable to secure placement and how an unmatched student can increase her or his chances of being selected in future matches.

Participants/Sample

Dietetic internship directors who ranked selection criteria in the 2012-2013 Applicant Guide to Supervised Practice were invited to participate in this study (21). The Applicant Guide to Supervised Practice is a yearly-updated reference guide summarizing over 250 dietetic internships and coordinated programs (21). By using this guide, a convenience sample of email addresses was collected for dietetic internship directors who met the inclusion criteria. A total of 223 internship directors were contacted to participate in this study. For the directors who manage more than one program that

met inclusion criteria, only one message was sent. A letter was written describing the study and inviting internship directors to participate (Appendix A). Institutional Review Board approval from Middle Tennessee State University (Appendix B) was obtained before the message was sent, and participants gave their informed consent by completing the survey (Appendix C). A total of 90 internship directors or 40% of the total number of dietetic internship directors responded and were used in the analysis.

Survey Instrument

A 13-item questionnaire was developed using Survey Monkey to determine: 1) which selection criteria internship directors consider most important, 2) personal opinions regarding the reasons applicants fail to secure placement in their program, and 3) and minimum current GPA scores accepted from their current 2012-2013 internship class. Directors were asked to use a 5-point Likert scale (1 = not at all important, 3 = somewhat important, and 5 = very important) or a not applicable option to rate the ten items used to select interns including total, DPD, and science GPA, volunteer experience, work experience, personal statement, references, interview, GRE score, and university's academic reputation. Demographic questions were asked regarding the type of program offered, number of years spent as dietetic internship director, the emphasis of the program, and the number of interns selected each year.

Statistical Analysis

Quantitative analysis was performed using the statistical software, Statistical Product and Service Solutions (SPSS, version 20.0, 2011). Dietetic internship directors were asked to rate the ten selection criteria items on a scale from 1 - 5 (1 = not at all

important, 3 = somewhat important, and 5 = very important). Respondents were given an option to choose “not applicable”. If the respondent chose not applicable, it was excluded from the analysis. A one-sample *t*-test was conducted where means were tested against the midpoint 3.0 (somewhat important) to determine the most important selection criteria among directors. To assess whether programs with certain emphases rated various selection criteria higher than others, *t*-tests were conducted on those with a medical nutrition therapy or clinical emphasis versus every other emphasis and a community or public health emphasis versus every other emphasis. The programs included in this analysis could have these emphases as a sole focus or as one of a few. To evaluate whether there was a difference in importance of selection criteria among types of dietetic internship programs, *t*-tests were performed to compare a dietetic internship without graduate credit versus dietetic internships with some graduate credit or a graduate degree. Distance programs were excluded from this analysis.

To assess the reasons that internship directors rate certain selection criteria higher, they were asked, “Out of the 10 items listed below, please choose the top three items that you feel are most associated with a student’s likelihood to succeed in your program.” The 10 choices given were the same as the selection criteria listed previously. If an answer was chosen, it was coded as a 1, and if it was not chosen, it was coded as a 0. A one-sample *t*-test was conducted using 0.5 as a midpoint ($n = 90$) to determine the number who chose the response versus the number who did not. By comparing the means, the top three most chosen answers were also recorded. Internship directors

were also asked, “Out of the 10 items listed below, please choose the top three items that you feel are most associated with an intern in your program passing the RD exam on the first attempt.” The statistical analysis of this question remained the same as the previous question.

While dietetic internship program directors often list a minimum GPA requirement for admission to their program, it is unknown whether interns with 2.75 or 3.0 GPAs are actually chosen for a program. To determine whether internship directors actually accept students with their minimum GPA requirements, they were asked, “What was the minimum total GPA that you accepted from your current internship class?” They were also asked to list the minimum DPD GPA and science GPA accepted from their current internship class. It was clear that some directors answered the question incorrectly and divulged their minimum requirement rather than their current class’s minimum. Answers were thrown out and categorized as missing variables if the words “minimum requirement” preceded the number in their answer. For the minimum DPD GPA and science GPA, many responded that they were unsure or they did not track this information. These answers were also thrown out and categorized as missing. The total usable responses were as follows: total GPA ($n = 72$), DPD GPA ($n = 64$), and science GPA ($n = 51$). A minimum, maximum, and mean were calculated for each of the GPA categories.

Qualitative analysis was performed on the last open-ended question of the survey. Directors were asked, “In your opinion, what is the most frequent reason that students do not match to your program?” Answers were transcribed by the researcher

into a word document and coded into 9 different categories including competitiveness, low GPA or GRE scores, poor work experience, poor personal statements, lack of leadership, poor interview skills, incomplete or poorly prepared applications, poor references, or other. Idiosyncratic responses were grouped in the other category.

CHAPTER IV: RESULTS

Respondents have spent a mean of 8.80 ± 6.52 years serving as an internship director with a minimum of 6 months and a maximum of 25 years. A total of 41 of the 90 (45.5%) programs included in the analysis were a dietetic internship without graduate credit, 35 of 90 (38.8%) were a dietetic internship with some graduate credit, 13 of the 90 (14.4%) were a dietetic internship with an advanced degree, and 2 of the 90 (2.2%) were a distance program. A total of 48.4% ($n = 44$) of respondents were the director of a program with a medical nutrition therapy or clinical emphasis either solely or in addition to other emphases. A total of 18.7% ($n = 17$) directed a program with a community or public health emphasis either solely or in addition to other emphases, and 7.7% ($n = 7$) had a food service management emphasis. Other emphases included health promotion and wellness ($n = 11$), research ($n = 6$), advocacy and public policy ($n = 1$), general ($n = 8$), sports nutrition ($n = 2$), geriatric ($n = 2$), cardiac ($n = 2$), leadership ($n = 4$), pediatrics or child nutrition ($n = 4$), nutrition education ($n = 2$), and other ($n = 19$). The mean number of interns accepted each year by the participating programs ($n = 88$) was 14.02 with a minimum of 3 and a maximum of 140 ($SD = 15.67$).

When selection criteria were tested against the midpoint 3.0 (somewhat important), results show that all of the criteria were significantly different from the scale midpoint except GRE score and university's academic reputation (as seen in Table 1). Directors felt that DPD GPA, total GPA, interview, and work experience were the most significant selection criteria. The interview only applied to 62% ($n = 56$) of programs; however, for programs with an interview, the directors ranked it as very important. Of

the 45 internship directors who require a GRE test score for admission, they felt that this score was only somewhat important.

Table 1. Ranking of selection criteria by dietetic internship directors

Selection Criteria	N	Mean	SD	t-value
GPA, DPD	82	4.68	.606	25.144
GPA, total	82	4.55	.669	20.949
Interview	56	4.46	1.008	10.886
Work experience	82	4.39	.797	15.786
GPA, science	80	4.25	.803	13.915
Personal statement	84	4.23	.812	13.843
References	84	4.12	.962	10.662
Volunteer experience	82	3.71	1.094	5.854
GRE Score	45	3.24	1.525	1.075
University's academic reputation	72	3.11	1.042	.905

When programs with a medical nutrition therapy emphasis either solely or in conjunction with other emphases were compared to the rest of the programs, there were no significant differences in the importance of selection criteria items. When programs with a community or public health emphasis were compared to the rest of the programs, there were no significant differences in the importance of selection criteria items.

When reviewing the items most associated with interns' likelihood to succeed in their program, results showed that work experience was rated as the most important. Table 2 shows the number of individuals and a percentage who said "yes" to that selection criteria item as one of the top three important items. When examining the group as a whole, the three items that were chosen most often were work experience, DPD GPA, and total GPA, respectively. The results that pertain to the association of an intern passing the RD exam on the first attempt show that DPD GPA and total GPA were the greatest predictors by internship directors. Table 3 shows the number of individuals and a percentage who said "yes" to that selection criteria item as one of the top three important items. The top three most chosen items associated with passing the RD exam on the first attempt were DPD GPA, total GPA, and science GPA.

Table 2. Predictors for succeeding in an internship program ($n = 90$)

Criteria	Yes	%
Work Experience	54	59.3%
GPA, DPD	42	46.2%
GPA, total	36	39.6%
Interview	29	31.9%
GPA, science	25	27.5%
Personal Statement	21	23.1%
References	19	21.1%
GRE Score	13	14.3%
Volunteer Experience	12	13.2%
University's academic reputation	2	2.2%

Table 3. Predictors for passing the registration exam on the first attempt ($n = 90$)

Criteria	Yes	%
GPA, DPD	55	60.4%
GPA, total	54	59.3%
GPA, science	44	48.4%
Work Experience	27	29.7%
GRE Score	24	26.4%
University's academic reputation	14	15.4%
References	10	11.1%
Interview	7	7.7%
Personal Statement	4	4.4%
Volunteer Experience	2	2.2%

Directors were asked to report the minimum total GPA, DPD GPA, and science GPA scores of applicants that they accepted from their current 2012-2013 internship class. The results are shown in Table 4. The mean total GPA and DPD GPA have a close range of 3.1-3.2.

Table 4. GPA range of students accepted to a dietetic internship

	N	GPA Range	Mean	Std. Deviation
Min. Total GPA	72	2.70 - 3.66	3.13	.218
Min. DPD GPA	64	2.55 – 3.72	3.20	.244
Min. Science GPA	51	2.00 - 3.00	2.94	.276

The responses to the open-ended question, “In your opinion, what is the most frequent reason that students do not match to your program?”, were coded by the researcher into nine different categories including competitiveness, low GPA or GRE scores, poor work experience, poor personal statements, lack of leadership, poor interview skills, incomplete or poorly prepared applications, poor references, or other. The most frequently coded response was low GPA or GRE scores. This was mentioned 35 times with 18 responses solely related to this factor. The competitiveness of the match process was mentioned 20 times. Many directors felt that there were too many qualified applicants for the number of positions available. Some indicated that they felt there were 30-40 qualified applicants that would do well in their program, but they were only able to accept a small number. Candidates with poor work experience or a lack of variety of work experiences were mentioned 20 times with multiple responses indicating that the amount or type of work experience could be a deciding factor between candidates.

The rest of the responses received 10 or fewer comments. Poor personal statements were listed 10 times with 3 responses indicating that a poorly written personal statement is the sole reason that applicants do not match to their program. Directors mentioned that this could result from an inability to convince the readers of the applicant's desire to attend that particular internship, using unprofessional language, or not following directions. The interview process was also listed by 10 directors. They divulged that a poor interview could result from a variety of reasons including poor interview skills, an inability to demonstrate nutrition knowledge, underdeveloped interpersonal skills, or a lack of knowledge about the program of interest. Seven directors mentioned a lack of certain attributes that would prevent a student from matching to their program. These were grouped into one category and included lack of leadership, maturity, work ethic, or responsibility. Five internship directors indicated that a poorly prepared or incomplete application is a reason that students will not match to their program. Five also indicated that poor references are a cause of failure to secure placement. The rest of the responses were idiosyncratic and were grouped into an "other" category which included an inability to think critically and apply knowledge, lack of appropriate team-work and conflict management, and describing themselves as procrastinators.

CHAPTER V: DISCUSSION AND CONCLUSION

The results of this study indicate that total, DPD, and science GPAs play a large role in the selection of dietetic interns. It was found that these three items are rated as the greatest determinants of whether an intern will pass the RD exam on the first attempt. It was also found that DPD GPA and total GPA were the second and third greatest predictors of a student's ability to perform well in an internship. Out of all of the selection criteria, DPD GPA and total GPA were the highest rated and most important items that internship directors look at when choosing interns. These findings align with ACEND's 2009 annual report as they found GPA to be the greatest determining factor in a student's ability to match to an internship (19). These findings reinforce the importance of performing well in undergraduate classes to maintain a high GPA.

This study also showed that while some internship directors accept students with GPAs at or near the minimum requirement of 2.75 or 3.0, many programs have a very high minimum GPA from their current class making the average minimum from programs a 3.13 and 3.20 for total and DPD GPA, respectively. It is likely that the programs who accepted students with their minimum GPA requirement greatly excelled in other important areas such as work experience or the interview.

Work experience also appeared to be a recurring important trend in the selection of interns. It was found to be the highest rated determinant in a student's ability to succeed in the internship program. It was also found to be the fourth most important selection criterion item according to internship directors.

Qualitative data from this study revealed dietetic internship directors feel that students fail to match to their program most often due to low GPA or GRE scores, poor work experience, and the sheer competitiveness of the match process. Directors also alluded to the importance of an impeccable personal statement that details the applicant's desire to attend that particular internship program. The writer should conceive their personal statement with care paying close attention to directions and ensuring it is grammatically correct and professionally written. Another vital factor in the selection process is the interview. This is where directors can gauge an applicant's personal characteristics such as moral value, ability to work in teams, resolve problems, or act as a leader.

The competitiveness of the match process should be brought to attention. Many internship directors felt they had a large number of qualified applicants who would do very well in their program, but they could only take a small number of individuals. This is important to note as very qualified applicants can fail to match to a program and subsequently become discouraged. As the number of disheartened, unmatched students rises, future enrollment rates in undergraduate dietetic programs may drop. In order to prevent a decline in the interest of the dietetics profession and ensure the continuing development of registered dietitians, there needs to be a decrease in the ratio of internship applicants to those who receive a match to a program.

By examining the results of this study, it is clear that there are a number of areas in which a student should excel to maximize the chances of matching to an internship. The two most important areas include GPA and work experience. If students have a low

GPA, it is recommended that they retake classes to increase their GPA to become a more competitive applicant. A student would also greatly benefit from gaining nutrition-related work experience throughout school. While GPA and work experience were found to be the most important factors when choosing interns in this study, one should not focus their attention solely on these items. It is still critically important that the applicant excel in all areas of interest as competitiveness of the internship has increased and there are a large number of qualified applicants. Mediocre students will fail to match to an internship as the expectations of internship directors are high and qualifications of other applicants are impressive.

Limitations

There are several limitations to this study. First, the survey instrument used was not validated prior to use which could account for some of the errors associated with misunderstanding. Second, the survey did not take into account a student's personal characteristics as these are not measurable. The list of selection criteria is not all-inclusive and could, therefore, make the results less reliable. The student's personal characteristics are often what come out in an interview, and the selection criteria items are used to choose the students who will obtain an interview. Lastly, the analysis of the qualitative data was completed by the researcher alone and would be more reliable if it were coded by a committee.

Recommendations for Future Research

This study found that DPD, total, and science GPA were the greatest predictors for an intern passing the registration exam on the first attempt; however, there is no

data to support this theory. It would be beneficial to assess the GPA scores of individuals who passed the RD exam on the first attempt as opposed to those who did not.

Conclusions

The nutrition profession has increased in popularity leading to an influx of graduates wishing to complete a dietetic internship to become a registered dietitian. The dramatic increase in the number of applicants for dietetic internships creates a competitive atmosphere where only the best succeed. Dietetic internship directors rate GPA and work experience very highly when choosing interns regardless of the program emphasis. While a student should be proficient in all areas looked at by internship directors, they would benefit the most from working to make their GPA and work experience stand out.

References

1. S. Erickson-Weerts. Past, present, and future perspectives of dietetics practice. *J Amer Diet Assoc*, 99 (1999), pp. 291-296.
2. J. O'Sullivan Maillet. Dietetics in 2017: What does the future hold? *J Amer Diet Assoc*, 102 (2002), pp. 1404-1406.
3. Academy of Nutrition and Dietetics. ACEND Connection On-Line Update (2012).
4. Registered Dietitian (RD): Educational and Professional Requirements, Academy of Nutrition and Dietetics website. <http://www.eatright.org>. Accessed March 13, 2013.
5. E. Parham, L. Robinson, J. Quinn. Program directors' opinions in regard to Didactic Program in Dietetics graduates' failure to secure placement in Supervised Practice Programs. *J Amer Diet Assoc*, 101 (2001), pp. 1047-1050.
6. B.R. Carruth, J. Sneed. Selection criteria for dietetic internship admission: what do internship directors consider most important? *J Amer Diet Assoc*, 90 (1990), pp. 999-1001.
7. B.J. Sullivan, M.R. Schiller, M.C. Horvath. Nutrition education and counseling: knowledge and skill levels expected by dietetic internship directors. *J Amer Diet Assoc*, 90 (1990), pp. 1418-1421.
8. Dietetics, Merriam- Webster Dictionary website. <http://www.merriam-webster.com/dictionary>. Accessed March 13, 2013.

9. Joining the Academy, Academy of Nutrition and Dietetics website. <http://www.eatright.org>. Accessed March 13, 2013.
10. Accreditation Council for Education in Nutrition and Dietetics, Academy of Nutrition and Dietetics website. <http://www.eatright.org/ACEND/>. Accessed March 13, 2013.
11. About the GRE Revised General Test. <http://www.ets.org>. Accessed March 13, 2013.
12. Didactic Programs in Dietetics, Academy of Nutrition and Dietetics website. <http://www.eatright.org>. Accessed March 13, 2013.
13. Dietetic Internships, Academy of Nutrition and Dietetics website. <http://www.eatright.org>. Accessed March 13, 2013.
14. Coordinated Programs in Dietetics, Academy of Nutrition and Dietetics website. <http://www.eatright.org>. Accessed March 13, 2013.
15. M.I. Barber, ed. *History of the American Dietetic Association*. Philadelphia, Pa: JB Lippincott Co; 1959.
16. T. Petrillo. Live the ADA legacy- annually. *J Amer Diet Assoc*, 102 (2002), pp.1046-1048.
17. P. Fitz. President's Page: About 80 years ago... *J Amer Diet Assoc*, 97 (1997), pp. 1160-1161.

18. Occupational Outlook Handbook, Bureau of Labor Statistics website.
<http://www.bls.gov/ooh/>. Accessed March 13, 2013.
19. Academy of Nutrition and Dietetics. ACEND 2009 Annual Report.
20. D. Kirk, C.W. Shanklin, M.A. Gorman. Attributes and qualifications that employers seek when hiring dietitians in business and industry. *J Amer Diet Assoc*, 89 (1989), pp. 494-498.
21. Nutrition and Dietetic Educators and Preceptors. *Applicant Guide to Supervised Practice 2012-2013*.

APPENDICES

Appendix A: Email sent to study participants

Dear dietetic internship director:

My name is Candice Jackson, RD, and I am a graduate student at Middle Tennessee State University working to complete my thesis and attain a Master's degree in Human Sciences with a concentration in Nutrition. I am conducting a research study regarding dietetic internships to determine the most important selection criteria when choosing applicants and the reasons behind those choices.

The results of this study will help future applicants learn what to focus on to make themselves more marketable to internship directors in today's internship matching process. It will also help unmatched students determine what will increase the likelihood of a future program match.

I am asking you to participate in a 13-item questionnaire that should take no more than 15 minutes of your time. The survey will contain some questions with answers attached, and some open-ended questions that will be left blank for you to indicate your answer. Questionnaires will be anonymous, and all responses will remain confidential. You will be giving your informed consent by taking the survey. If you would like further information about this research study, please do not hesitate to contact myself, Candice Jackson, at cda2p@mtmail.mtsu.edu.

Your participation in this study is greatly appreciated. Your assistance in this study will benefit future nutrition professionals.

Sincerely,

Candice Jackson

Principal Investigator

Cda2p@mtmail.mtsu.edu

Dr. Lisa Sheehan-Smith, Thesis Committee Chair



January 27, 2013

Candice Allen, Dr. Lisa Sheehan-Smith Department
of Human Sciences cda2p@mtmail.mtsu.edu,
lisa.sheehan-smith@mtsu.edu

Protocol Title: "The Dietetic Internship Process: Ways to Increase a Student's Marketability"

Protocol Number: 13-187

Dear Investigator(s),

The exemption is pursuant to 45 CFR 46.101(b) (2). This is because the research being conducted involves the use of educational tests, survey procedures, interview procedures or observation of public behavior.

You will need to submit an end-of-project report to the Compliance Office upon completion of your research. Complete research means that you have finished collecting data and you are ready to submit your thesis and/or publish your findings. Should you not finish your research within the three (3) year period, you must submit a Progress Report and request a continuation prior to the expiration date. Please allow time for review and requested revisions. Your study expires on **January 27, 2016**.

Any change to the protocol must be submitted to the IRB before implementing this change.

According to MTSU Policy, a researcher is defined as anyone who works with data or has contact with participants. Anyone meeting this definition needs to be listed on the protocol and needs to provide

a certificate of training to the Office of Compliance. **If you add researchers to an approved project,**

please forward an updated list of researchers and their certificates of training to the Office of Compliance before they begin to work on the project. Once your research is completed, please send us a copy of the final report questionnaire to the Office of Compliance. This form can be located at www.mtsu.edu/irb on the forms page.

Also, all research materials must be retained by the PI or **faculty advisor (if the PI is a student)** for at least three (3) years after study completion. Should you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

[Andrew W. Jones](#)

Compliance Office
615-494-8918
Compliance@mtsu.edu

Appendix C: Survey Tool

Dietetic internship director,

The purpose of this study is to determine the perceptions of dietetic internship directors on the most important selection criteria when choosing dietetic interns and the reasons behind their choices. The results of this study will help future applicants learn what to focus on to make themselves more marketable in today's internship matching process.

If you would like to participate in this study, please click the "next" button below to begin the survey. By beginning the survey, you will be giving your informed consent to participate. All questionnaires will remain anonymous and confidential. All responses received will be published in the form of aggregate data only.

Thank you for your participation. Your assistance in this study will greatly benefit future nutrition professionals.

Sincerely,

Candice Jackson

Middle Tennessee State University

Cda2p@mtmail.mtsu.edu

1. How long have you been in your current position of dietetic internship director?

2. What type of program do you offer?

- Dietetic internship without graduate credit
- Dietetic internship with some graduate credit
- Dietetic internship with advanced degree
- Distance program

3. What is your emphasis/focus of your dietetic internship program? Please check all that apply.

- Clinical or MNT
- Community or Public Health
- Food Service Management
- Health Promotion and Wellness
- Research
- Advocacy and Public Policy
- General
- Sports Nutrition
- Geriatric
- Other (please specify)

4. How many interns do you accept in your program each year?

5. Please rate the following selection criteria on a scale from not at all important to very important. Please choose N/A if that item does not apply to your program.

	Not at all Important		Somewhat Important		Very Important	N/A
GPA, total	<input type="checkbox"/>					
GPA, DPD	<input type="checkbox"/>					
GPA, Science	<input type="checkbox"/>					
Volunteer Experience	<input type="checkbox"/>					
Work Experience	<input type="checkbox"/>					
Personal Statement	<input type="checkbox"/>					
References	<input type="checkbox"/>					
Interview	<input type="checkbox"/>					
GRE Score	<input type="checkbox"/>					
University's Academic Reputation	<input type="checkbox"/>					

6. Out of the 10 items listed below, please choose the top three items that you feel are most associated with a student's likelihood to succeed in your program.

- GPA, Total Work Experience GRE Score
 GPA, DPD Personal Statement University's Academic
 GPA, Science References Reputation
 Volunteer Experience Interview

7. Out of the 10 items listed below, please choose the top three items that you feel are most associated with an intern in your program passing the RD exam on the first attempt.

- GPA, Total Work Experience GRE Score
 GPA, DPD Personal Statement University's Academic
 GPA, Science References Reputation
 Volunteer Experience Interview

8. Do you require an applicant to have dietetics-related work experience?

- Yes
 No

If yes, what is the minimum number of hours required?

9. Does your program require applicants to take the Graduate Record Examination (GRE)?

Yes

No

If yes, what is the minimum GRE score you accepted from your current internship class?

10. What was the minimum total GPA that you accepted from your current internship class?

11. What was the minimum DPD GPA that you accepted from your current internship class?

12. What was the minimum science GPA that you accepted from your current internship class?

13. In your opinion, what is the most frequent reason that students do not match to your program?

Thank you for your participation in this study.

If you have any questions regarding this study, please do not hesitate to contact myself, Candice Jackson, at cda2p@mtmail.mtsu.edu.