

Characteristics and Qualities Needed for Success by School Nutrition Directors

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Please note that this study was published before the implementation of Healthy, Hunger-Free Kids Act of 2010, which went into effect during the 2012-13 school year, and its provision for Smart Snacks Nutrition Standards for Competitive Food in Schools, implemented during the 2014-15 school year. As such, certain research may not be relevant today.

ABSTRACT

Purpose/Objectives

The purpose was to identify the leadership characteristics and qualities perceived by school nutrition (SN) directors as necessary for success and determine whether training is needed to develop these attributes.

Methods

A panel of seven SN professionals was assembled to ascertain their opinions regarding leadership characteristics and qualities needed for success by SN directors. This information was used to develop a survey that was mailed to 932 SN directors in all seven USDA regions. The survey asked SN directors to rate the importance of 33 leadership characteristics and qualities and rate the importance of training to develop these characteristics and qualities. SN directors were also asked to provide information about themselves and their SN programs.

Results

There was a 38% response rate. Over three-fourths of SN directors (76.5%) reported they have worked in SN programs for 11 or more years. Characteristics and qualities with the highest mean ratings were: "maintains integrity," "accepts responsibility," "finds solutions," and "leads in an ethically appropriate manner." When these mean importance ratings were compared by school district enrollment size, it was observed that SN directors from the smallest districts (<2,799 students) rated four characteristics and qualities ("creates a vision for their SN operation," "has a global perspective," "takes risks," and "possesses political savvy") significantly less important (p<.002) compared to SN directors from larger districts.

Applications to Child Nutrition Professionals

Findings suggest that training programs are needed to assist in preparing SN professionals to lead SN programs. These programs should be targeted at all SN professionals. The leadership characteristics and qualities identified in this study could provide the foundation for educational and training programs.

INTRODUCTION

The multifaceted environment of school nutrition (SN) programs, characterized by several urgent and critical issues, emphasizes the need for strong leadership skills by SN directors. Although the role of SN directors is understood, and the competencies, knowledge, and skills needed have been identified (Rainville & Carr, 2001), there is an absence of research identifying the necessary leadership skills for SN directors. Martin (2008) proposed that a major role of a SN program was as a non-profit business benefiting a school district.

Directors of SN programs are facing several critically important challenges. According to SN directors at the *Fourth Annual Roundtable of Leaders* (2008), the top three significant challenges facing SN directors are school wellness, finances, and Hazard Analysis and Critical Control Points (HACCP) (Shop Talk, 2008). School wellness and HACCP food safety program implementation are urgent due to mandates established by Child Nutrition and WIC Reauthorization Act of 2004 (USDA, 2004; USDA, 2005) and critical due to the high rates of childhood obesity (Ogden, Carroll, & Flegal, 2008) and the dangers associated with food poisoning (Almanza & Sneed, 2003). Finances, always a high priority issue, are even more critical due to a turbulent global economy and the changing school environment, where SN directors are being asked to substitute

calorically dense, nutrient scarce vending snacks that generate consistent revenues with healthier alternatives (Wharton & Schwartz, 2008).

Each of the challenges and aspects of SN programs mentioned above can be facilitated with the five standard management functions (planning, organizing, staffing, leading, and controlling) (Spears & Gregoire, 2007). However, since it is not physically possible for SN directors to dedicate time and effort each day to ensuring each facet of their SN program is operating effectively, they must focus their efforts on a reasonable number of activities that will yield the greatest results. Such an approach is the essence of leadership and the distinction between leadership and management.

There are many resources for interpreting the meanings of management and leadership within a business setting. In "The Seven Habits of Highly Effective People" Stephen Covey (1989) described management as efficiency in climbing the ladder of success and leadership as determining whether the ladder is leaning against the right wall. The website Business Dictionary.com presents management as the coordination of policies and activities based on defined objectives and leadership as establishing a clear vision, communicating that vision so others will follow, providing the necessary resources to make the vision possible, and balancing the conflicting interests of stakeholders (2009a, 2009b). Bennis and Nanus (1985) suggested that leadership is what gives an organization vision. Hitt (1988) explained that leaders must have power to transform vision into action, and power is found in the connections and associations between and among people. Hitt further indicated that through these relationships, both formal (positional) and informal (charismatic or persuasive), leaders have the capability to get things done.

Studies in the foodservice and hospitality industry suggest opportunities to increase the leadership skills of industry managers. Results of an online survey of 580 foodservice and hospitality managers and executives indicated a lack of leadership development within the foodservice industry (Elliot Leader Institute, 2003). Cichy, Sciarini, and Patton (1992) concluded that the foundations for effective leadership in the commercial foodservice industry were "ability to develop and provide a compelling vision," "earn and return trust," "listen and communicate effectively," and "persevere when others give up."

Research pertaining to leadership in the management of SN programs is sparse. A few studies indicate an impending shortage of SN leaders as the rate of retirement of qualified SN professionals continues to increase (DeMicco et al., 1997; Lipowski, 1999). In 2008, researchers reported on the operational issues and practices encountered by SN directors in large school districts with more than 30,000 student enrollment (Nettles, Carr, Johnson, & Federico, 2008). Additionally, a similar study evaluating the operational issues and practices encountered by SN directors in school districts with less than 30,000 students was conducted by Rushing, Nettles, and Johnson (2009). The purpose of this study is to address this void in the literature by identifying the leadership characteristics and qualities perceived by SN directors as necessary for success and determining whether training is needed to develop these attributes.

METHODOLOGY

Sample

The sample for this research study consisted of SN directors from all United States public school districts with 30,000 or more student enrollment (n=232) and a random sample of 700 SN directors from public school districts with less than 30,000 student enrollment. The study samples were selected from the database of school districts maintained by Market Data Retrieval, a company that specializes in the school market. The group of SN directors from school districts with 30,000 or greater in student enrollment included individuals from all seven USDA regions with 51 districts in the Western region, 17 districts in the Mountain Plains region, 17 districts in the Midwest region, 4 districts in the Northeast region, 25 districts in the Mid-Atlantic region, 71 districts in the Southeast, and 47 districts in the Southwest region. The group of SN directors from school districts with less than 30,000 in student enrollment was selected through random stratification by USDA region, with all states being represented and 100 SN directors selected from each region.

Research Design

The purpose of this research was to determine leadership characteristics and qualities perceived by SN directors as necessary for success, and determine whether training is needed to develop these attributes. To accomplish this goal, a survey was developed from expert panel discussions with seven SN professionals on leadership characteristics and qualities of SN directors.

Survey Instrument

The survey instrument consisted of 33 leadership characteristics and qualities. For each characteristic and

quality, SN directors were asked to respond to two questions: 1) "How important is the characteristic or quality to being a successful SN director?" and 2) "How important is training to develop the characteristic or quality?" Importance was rated on a 4-point scale, ranging from 1 (*not important*) to 4 (*very important*). The survey also included questions designed to gather information about study participants and their SN operations.

Data Collection

The expert panel reviewed the survey draft and minor wording changes were made. The final version of the survey was mailed to the 932 SN directors in the study sample with a cover letter and a self-addressed, postage-paid return envelope. The cover letter explained the purpose of the study, asked for recipient participation, assured the recipient of the confidentiality of their responses, provided researchers' contact information for questions and concerns, and described the return instructions for the completed survey. No identifying codes were placed on the survey instruments, thus preserving the anonymity of all respondents. Participants were asked to return the completed surveys within a three week time period. One to three weeks later, a follow-up letter was mailed to all directors encouraging them to complete and return the surveys. The researchers followed informed consent procedures approved by the Human Subjects Protection Review Committee at The University of Southern Mississippi for the research study.

Data Analysis

Survey data were analyzed using the statistical package SPSS Version 15.0 for Windows. Descriptive statistics included means, standard deviations, and frequencies of total responses. One-way ANOVA with Tukey's HSD post hoc was conducted to measure the effect of student enrollment on characteristics/qualities of directors operating SN programs. HSD is a method of ensuring that the chance of finding a significant difference in any comparison (under a null model) is maintained at the alpha level of the test, preventing a type I error. Due to the number of tests run, Bonferroni Corrections were used to reduce the possibility of a type I error.

RESULTS AND DISCUSSION

A 38% response rate (355 of 931) was observed. One survey was returned indicating that the school district did not have a SN director at this time, thus reducing the sample from 932 to 931. Two surveys were not used in the data analysis because they did not meet enrollment criteria and an additional survey was not used as it arrived too late to be included.

Sample Characteristics

Demographic data for the responding SN directors are presented in Table 1.The majority of respondents were female (83.1%). The preponderance of SN directors (74.1%) had achieved a bachelor's degree or higher, while almost one-third (31.0%) had achieved a master's degree or higher. For those SN directors with a bachelor's degree or higher, the primary fields of study were nutrition/dietetics (22.6%), food and nutrition (19.5%), other (19.0%), business (17.7%), and foodservice management (17.7%).

Over one-third of respondents (38.8%) indicated they were School Nutrition Association (SNA) certified, however 29.6% reported they were not certified, and only 17.6% indicated they were registered dietitians or certified by the state department of education. When asked the form of continuing education that they prefer, the overwhelming majority of respondents (85.2%) indicated they would prefer a meeting or conference.

The majority of directors responded that they have worked in SN programs for 11 or more years (76.5%) and in their current position for less than ten years (59.6%). When asked where they worked prior to their current position, almost half of the respondents reported they had experience in school nutrition (48.3%), while 13.7% indicated restaurant or healthcare foodservice management. More than one-quarter (29.2%) of SN directors reported they would be retiring in the next five years, while another 16.9% indicated that were not sure if they would be retiring during that time frame. When asked to choose from a list of criteria for selecting a successor for their position, the criteria most often selected were "experience on a SN management team in a school district" (54.6%), "experience as a SN director in a smaller district" (50.7%), "undergraduate degree in nutrition" (43.9%), and "undergraduate degree in business" (35.8%) (Table 1).

Table 1. Personal Characteristics of Respondents

Question	Frequencya	%
What is your gender?		
Female	286	83.1

Male	58	16.9
What is your highest level of education?		
High school diploma or GED	63	18.6
Associate degree	34	10.0
Bachelor's degree	90	26.5
Some graduate credits	47	13.9
Master's degree	67	19.8
Graduate hours beyond master's degree	31	09.1
Doctoral degree	7	02.1
Nutrition/Dietetics	51	22.6
Food and Nutrition	44	19.5
Other	43	19.0
Business	40	17.7
Foodservice Management	24	17.7
Child Nutrition and Management	12	05.3
Hospitality Management	10	04.4
Culinary Foodservice	2	00.9
What is your certification/credentialed status?b		
SNA certified	130	38.8
Not certified	99	29.6
SNS credentialed	79	23.6
State Department of Education certified	59	17.6
Registered Dietitian	59	17.6
Licensed Dietitian/Nutritionist	29	08.7
How many years have you worked in SN programs?		
Less than one year	6	01.7

1 to 5 years	32	09.2
6 to 10 years	43	12.4
11 to 15 years	70	20.2
16 to 20 years	72	20.8
Greater than 20 years	123	35.5
How long have you been in your current position?		
Less than one year	21	06.1
1 to 5 years	99	28.8
6 to 10 years	85	24.7
11 to 15 years	62	18.0
16 to 20 years	45	13.1
Greater than 20 years	32	09.3
Prior to taking your current position, did you work		
Other	125	38.0
On the SN management team in a school district	87	26.4
As a SN director in a smaller school district	39	11.9
As a SN director in a larger school district	33	10.0
As a restaurant manager	25	07.6
As a healthcare foodservice director	20	06.1
Will you be retiring in the next five years?		
Yes	100	29.2
No	185	53.9
Not Sure	58	16.9
In choosing a successor for your position, would you recommend ^b		
Experience on the SN management team in a school district	183	54.6
Experience as a SN director in a smaller district	170	50.7
Undergraduate degree in nutrition	147	43.9

Undergraduate degree in business	120	35.8
Graduate degree in nutrition	84	25.1
Graduate degree in business	71	21.2
Experience in foodservice management in healthcare	32	09.6
Both	284	83.5
Print-based resources	33	09.7
Web-based resources	23	06.8
What form of continuing education do you prefer?b		
Meeting or conference	293	85.2
Professional development publication/article	164	47.7
Preconference program	101	29.4
Independent study (CD ROM, internet)	95	27.6
Small study group	92	26.7
Online course/distance education	90	26.2
Blended learning (face-to-face and online)	89	25.6
Independent study (video, manuals)	86	25.0
Satellite seminar	76	22.1
Academic course work	63	18.3
Self study program	60	17.4
Home study course	37	10.8
Interactive multimedia modules	26	07.6
Poster session	20	05.8

Note. SN = School Nutrition

Characteristics of School Nutrition Programs

SN directors responded to several questions intended to describe their districts' SN programs (Table 2). Respondents were from all USDA regions, with the highest percentages from the Southeast (19.7%), Western (17.1%), Mountain Plains (16.2%), and Southwest (14.8%). Almost one-third (32.1%) of SN directors were employed in districts with less than 2,799 students and 19.2% worked in districts with 40,000 or greater

^a Total N varies based on responses for each question

^b Total exceeds 100% since respondents could select more than one response

students. The remaining directors were employed in districts ranging in size from 2,800-9,999 students (25.9%) and 10,000-39,999 students (22.8%). Approximately three-fourths (75.1%) of respondents described enrollment in their school district over the last five years as steady or increasing. Almost one half of SN directors (48.0%) reported having ten or less feeding sites in their districts, while only 11.9% of respondents are serving 70 or more feeding sites.

Table 2. Program Characteristics of Respondents

Question	Frequencya	%
In what USDA region do you work?		
Western	59	17.1
Mountain Plains	56	16.2
Midwest	42	12.2
Northeast	29	08.4
Mid-Atlantic	40	11.6
Southeast	68	19.7
Southwest	51	14.8
What is the total enrollment in your school district?		
Less than 2799 students	110	32.1
2800 to 9999 students	89	25.9
10000 to 29999 students	49	14.3
30,000 to 39,999 students	29	08.5
40,000 to 49,999 students	24	07.0
50,000 to 69,999 students	23	06.7
70,000 to 99,999 students	9	02.6
100,000 or greater students	10	02.9
How many feeding sites do you serve?		
5 or less sites	101	29.4
6 to 10 sites	64	18.6
11 to 20 sites	55	16.0
21 to 39 sites	43	12.5
40 to 69 sites	40	11.6

70 to 99 sites	22	06.4
100 to 149 sites	9	02.6
150 or more sites	10	02.9
How would you describe your school district over the last 5 years?		
Increasing enrollment	141	40.9
Enrollment steady	118	34.2
Decreasing enrollment	86	24.9

^a Total N varies based on responses for each question

Characteristics and Qualities of Successful SN Directors

SN directors were provided 33 phrases describing qualities or characteristics of directors operating SN programs and were asked to rate the importance of each phrase to being a successful SN director using a scale from 1 (not important) to 4 (very important). Table 3 presents the means and standard deviations for the 33 phrases in descending order of importance. Twenty-seven of the 33 phrases had mean ratings of greater than 3.5, signifying that the majority of SN directors rated these phrases as "important" or "very important." Characteristics with the highest mean ratings were: "maintains integrity" (3.93 + 0.25), "accepts responsibility" (3.92 + 0.30), "finds solutions" (3.91 + 0.29), and "leads in an ethically appropriate manner" (3.89 + 0.32). "Maintaining integrity" and "leading in an ethically appropriate manner" are concepts closely related to "earning and returning trust", a characteristic Cichy et al. (1992) described as one of the primary foundations for effective leadership in the commercial foodservice industry. Characteristics with the lowest mean ratings were: "conducts applied research" (2.66 + 0.82) and "micro-manages on rare occasions" (2.74 + 0.89).

When the mean importance ratings of the characteristics and qualities needed for success were compared by school district enrollment size, two prominent distinctions were observed. First, with the exception of four characteristics and qualities, no significant differences (p<.002) were observed. Second, SN directors in school districts with the smallest student enrollment range (less than 2,799 students) rated four characteristics and qualities ("creates a vision for their SN operation," "has a global perspective," "takes risks," and "possesses political savvy") significantly less important (p<.002) compared to SN directors from districts with larger student enrollment.

Table 3. Mean Importance Ratings and Standard Deviations for Characteristics and Qualities to be a

Successful School Nutrition (SN) Director

Statement	N	Meana	SD
Maintains integrity	306	3.93	0.25
Accepts responsibility	318	3.92	0.30
Finds solutions	310	3.91	0.29
Leads in an ethically appropriate manner	311	3.89	0.33
Supports open communication	307	3.85	0.37
Possesses ability to multi-task	315	3.84	0.40
Listens actively	314	3.83	0.38

Leads others effectively	315	3.83	0.38
Handles difficult people and different personalities	307	3.81	0.39
Recognizes strengths of others	309	3.79	0.41
Handles conflict effectively	311	3.78	0.42
Desires to gain new knowledge	313	3.77	0.45
Makes decisions in a timely manner	311	3.77	0.45
Manages with confidence	314	3.74	0.46
Thinks independently	308	3.72	0.50
Delegates tasks appropriately	314	3.71	0.47
Knows own strengths and weaknesses	311	3.70	0.47
Conveys passion for their SN operation	306	3.69	0.53
Uses coaching skills effectively	311	3.68	0.51
Applies team building skills	312	3.68	0.53
Creates a vision for their SN operation	307	3.66	0.55
Considers potential risks before making decisions	312	3.65	0.51
	312	3.63	0.57
Possesses analytical skills	313	3.61	0.56
Strategizes solutions for potential problems	307	3.59	0.56
Supports creativity in others	312	3.55	0.57
Manages with determination	318	3.53	0.56
Changes management styles to fit situation	317	3.41	0.72
Possesses political savvy	324	3.20	0.79
Takes risks	316	3.07	0.79
Has a global perspective	315	3.04	0.84
Micro-manages on rare occasions	321	2.74	0.90
Conducts applied research	313	2.66	0.82

^a Scale = 1 (*not important*) to 4 (*very important*)

Training Needed to Develop Characteristics and Qualities of Successful SN Directors

Respondents also were asked to rate the importance of training to develop these characteristics and qualities using a scale ranging from 1 (not important) to 4 (very important). Table 4 depicts the means and standard deviations for the 33 characteristics and qualities in descending order of importance. Eleven of the 33 characteristics and qualities phrases had mean ratings greater than 3.5 and another 18 phrases had mean ratings greater than 3.0, suggesting that SN directors believe training programs are important to developing these qualities. Characteristics and qualities with the highest importance ratings for training include: "handles difficult people and different personalities" (3.65 + 0.57), "handles conflict effectively" (3.63 + 0.58), "leads others effectively" (3.60 + 0.64), "applies team building skills" (3.60 + 0.63) "leads in an ethically appropriate manner" (3.58 + 0.70), and "finds solutions" (3.57 + 0.66). Characteristics and qualities with the lowest mean ratings for training were: "micro-manages on rare occasions" (2.50 + 0.96), "conducts applied research" (2.66 + 0.91), "takes risks" (2.79 + 0.90), and "has a global perspective" (2.79 + 0.87). When SN directors' opinions on the importance of training to develop characteristics and qualities needed for success were compared by student enrollment size of school districts, no significant differences were observed (p < .002).

Table 4. Mean Importance Ratings and Standard Deviations for Training Needed to Develop Characteristics

of Directors Operating School Nutrition (SN) Programs

Statement	N	Mean	SD
Handles difficult people and different personalities	304	3.65	0.57
Handles conflict effectively	294	3.63	0.58
Leads others effectively	293	3.60	0.64
Applies team building skills	306	3.58	0.63
Leads in an ethically appropriate manner	299	3.58	0.70
Finds solutions	288	3.57	0.66
Supports open communication	290	3.57	0.63
Maintains integrity	289	3.54	0.75
	293	3.53	0.69
Desires to gain new knowledge	292	3.53	0.68
Uses coaching skills effectively	296	3.51	0.59
Recognizes strengths of others	294	3.49	0.70
Accepts responsibility	298	3.48	0.79
Listens actively	308	3.47	0.71
Creates a vision for their SN operation	293	3.44	0.70
Delegates tasks appropriately	291	3.43	0.72
Makes decisions in a timely manner	290	3.42	0.77
Possesses ability to multi-task	298	3.39	0.80

Considers potential risks before making decisions 288 3.33 0.74 Possesses analytical skills 296 3.33 0.76 Knows own strengths and weaknesses 295 3.32 0.86 Changes management styles to fit situation 296 3.31 0.76 Conveys passion for their SN operation 299 3.25 0.96 Supports creativity in others 292 3.25 0.76 Thinks independently 288 3.20 0.9 Manages with determination 293 3.13 0.8 Possesses political savvy 294 3.00 0.96 Has a global perspective 291 2.79 0.8	Strategizes solutions for potential problems	300	3.37	0.72
Possesses analytical skills 296 3.33 0.76 Knows own strengths and weaknesses 295 3.32 0.86 Changes management styles to fit situation 296 3.31 0.76 Conveys passion for their SN operation 299 3.25 0.96 Supports creativity in others 292 3.25 0.76 Thinks independently 288 3.20 0.9 Manages with determination 293 3.13 0.8 Possesses political savvy 294 3.00 0.96 Has a global perspective 291 2.79 0.8	Manages with confidence	292	3.36	0.78
Knows own strengths and weaknesses2953.320.86Changes management styles to fit situation2963.310.76Conveys passion for their SN operation2993.250.96Supports creativity in others2923.250.76Thinks independently2883.200.96Manages with determination2933.130.86Possesses political savvy2943.000.96Has a global perspective2912.790.86	Considers potential risks before making decisions	288	3.33	0.74
Changes management styles to fit situation 296 3.31 0.75 Conveys passion for their SN operation 299 3.25 0.95 Supports creativity in others 292 3.25 0.75 Thinks independently 288 3.20 0.9 Manages with determination 293 3.13 0.85 Possesses political savvy 294 3.00 0.96 Has a global perspective 291 2.79 0.85	Possesses analytical skills	296	3.33	0.76
Conveys passion for their SN operation 299 3.25 0.99 Supports creativity in others 292 3.25 0.79 Thinks independently 288 3.20 0.99 Manages with determination 293 3.13 0.89 Possesses political savvy 294 3.00 0.99 Has a global perspective 291 2.79 0.89	Knows own strengths and weaknesses	295	3.32	0.80
Supports creativity in others 292 3.25 0.79 Thinks independently 288 3.20 0.9 Manages with determination 293 3.13 0.89 Possesses political savvy 294 3.00 0.99 Has a global perspective 291 2.79 0.89	Changes management styles to fit situation	296	3.31	0.78
Thinks independently 288 3.20 0.9 Manages with determination 293 3.13 0.8 Possesses political savvy 294 3.00 0.9 Has a global perspective 291 2.79 0.8	Conveys passion for their SN operation	299	3.25	0.92
Manages with determination 293 3.13 0.8. Possesses political savvy 294 3.00 0.9. Has a global perspective 291 2.79 0.8.	Supports creativity in others	292	3.25	0.79
Possesses political savvy 294 3.00 0.90 Has a global perspective 291 2.79 0.80	Thinks independently	288	3.20	0.91
Has a global perspective 291 2.79 0.8	Manages with determination	293	3.13	0.83
	Possesses political savvy	294	3.00	0.90
Takes risks 200 2.70 0.00	Has a global perspective	291	2.79	0.87
1 arcs 115rs 500 2.79 0.90	Takes risks	300	2.79	0.90
Conducts applied research 295 2.66 0.9	Conducts applied research	295	2.66	0.91
Micro-manages on rare occasions 303 2.50 0.96	Micro-manages on rare occasions	303	2.50	0.96

^a Scale = 1 (*not important*) to 4 (*very important*)

CONCLUSIONS AND APPLICATION

Considering the amount of time American children spend in school each year, SN programs have a role in influencing the nutritional health and well-being of the nation's youth. The more effective SN directors are in leading and managing their SN programs, the more positive the potential outcome. The literature demonstrates that SN programs operate in multifaceted environments with many diverse aspects (Martin, 2008; Rainville & Carr, 2001; Wharton & Schwartz, 2008) and SN directors face several critically important challenges such as managing finances and implementing school wellness and HACCP food safety programs (Almanza & Sneed, 2003; Ogden et al., 2008; Shop Talk, 2008; USDA, 2004, 2005; Wharton & Schwartz, 2008). To compound this demanding environment, research suggests impending shortages of SN directors (DeMicco et al., 1997; Lipowski, 1999) and a lack of leadership development within the foodservice industry (Cichy et al., 1992; Elliot Leader Institute, 2003). Findings of this research study suggest that leadership of SN operations is critical to the success of all SN programs.

SN directors responding to this survey were from all seven USDA regions and represented districts with various student enrollments ranging from less than 2,799 to over 100,000 students. The number of feeding sites within each district ranged from five or less to over 150. The typical survey respondent was a female with a bachelor's degree (or higher) in nutrition/dietetics, food and nutrition, other, business, or foodservice management. These results indicate that the preponderance of SN directors in the United States are college educated women. Therefore, the development of leadership programs aimed at SN directors should be targeted to meet the specific needs of this population group.

The results of this study support previous research which proposed the need to develop leaders within SN programs. First, as noted in the literature review, there appears to be a lack of leadership development across

the foodservice industry (Cichy et al., 1992; Elliot Leader Institute, 2003). Second, results of this study suggest that upwards of approximately 25% of SN director positions nationwide may become vacant in the next five years. Third, results indicate most SN directors believe their successors should have SN management experience, either on a school management team or as a SN director in a smaller district. Fourth, results verify that many current SN directors worked in SN programs prior to securing their current position. Finally, results support the need to create on-the-job leadership opportunities since over one-third of SN directors (38%) reported they had not held a district-level management position in a SN program or management position in either restaurant or healthcare foodservice prior to securing their current job.

This study demonstrates that SN directors value the importance of leadership characteristics and qualities for guiding SN programs. Twenty-seven of the 33 characteristics and qualities necessary for success as SN directors were rated as "important" or "very important." The characteristics and qualities assigned the highest mean ratings were "maintains integrity," "accepts responsibility," "finds solutions," and "leads in an ethically appropriate manner." Attributing "maintains integrity" and "leads in an ethically appropriate manner" with comparably high ratings suggest respondents feel strongly that SN directors need a moral compass, while elevating "accepts responsibility" to a high rating suggests respondents feel SN directors must be accountable. These high ratings are understandable since SN directors manage funds received through federal assistance programs and guard the nutritional well-being of children during the school day. Assigning "finds solutions" with high ratings suggests SN directors value the ability to solve problems. This is logical since SN directors are faced with many challenges and complexities in guiding SN programs. SN directors rated "conducts applied research" and "micro-manages on rare occasions" with the lowest ratings. This is understandable since micro-management is often seen as counterproductive and both micromanagement and conducting applied research are viewed as time consuming. Furthermore, conducting research is likely foreign to the majority of SN directors since more than one-half (60.1%) do not have graduate degrees or higher.

When mean importance rating of the characteristics and qualities were compared by school district student enrollment size, two primary observations were made. First, with the exception of four characteristics and qualities, no significant differences (p<.002) were noted based on school district student enrollment size. This suggests that the majority of the leadership characteristics and qualities necessary for success are the same for all SN directors, regardless of school district size.

Second, SN directors from the smallest school districts (<2,799 in student enrollment) rated four characteristics and qualities ("creates a vision for their SN operation," "has a global perspective," "takes risks," and "possesses political savvy") significantly less important (p<.002) compared to SN directors from larger school districts. The difference with regards to "possesses political savvy" may suggest that SN directors in the larger school districts have more opportunities to engage in internal and external activities that impact their SN programs. With regards to vision, global perspective, and risk taking, the rationale behind why SN directors would rate these items significantly less important is not clear. Experts view vision, global perspective, risk taking, and politically savvy as important attributes of leaders; however, global perspective is often seen as a higher order leadership trait (Bennis, Spreitzer, & Cummings, 2001). These finding suggest that further research is needed to explore the characteristics and qualities needed for success by SN directors in the smallest school districts, specifically those with 2,799 or less in student enrollment.

When respondents were asked to rate the importance of training to develop the 33 characteristics and qualities, it was observed that 29 characteristics and qualities were rated as important or very important. When these importance ratings were compared by school district enrollment size of SN directors, no significant differences were observed (p<.002). These results suggest that SN directors, regardless of school enrollment size, view training as important or very important to develop these characteristics and qualities. Furthermore, these results demonstrate that SN directors, regardless of school district size, similarly prioritize the characteristics and qualities based on the need for developmental training. The characteristics and qualities with the highest importance ratings to develop for training were "handles difficult people and different personalities," "handles conflict effectively," "leads others effectively," "applies team building skills," "leads in an ethically appropriate manner," and "finds solutions," indicating that these items should take priority when SN leadership training programs are developed.

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