ΤUΤΕ O F S TI N RESOURCES • TRAINING • RESEARCH Evaluation of Regional Team Up for School Nutrition Success Workshops 2017 Applied Research Division The University of Southern Mississippi 1-800-321-3054

# Evaluation of Regional Team Up for School Nutrition Success Workshops

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# EVALUATION OF REGIONAL TEAM UP FOR SCHOOL NUTRITION SUCCESS WORKSHOP

#### **EXECUTIVE SUMMARY**

The Healthy, Hunger-Free Kids Act (HHFKA) of 2010 reauthorized child nutrition programs, changing nutrition standards to provide healthier and more nutritious meals to children across the United States. The reauthorization offered nutrition-related improvements in school meals, and the need for school nutrition (SN) professionals to meet the challenges of implementing new HHFKA of 2010 meal patterns arose. To assist SN professionals with implementing the HHFKA of 2010 to improve their SN operations, the United States Department of Agriculture (USDA), Food and Nutrition Services partnered with the Institute of Child Nutrition (ICN), state agencies, and allied organizations to launch a peer-mentoring initiative. This initiative, Team Up for School Nutrition Success (Team Up), consisted of a series of two-day, face-to-face regional workshops that used a counseling model to create a structured environment to encourage SN professionals to share issues, challenges, or missed opportunities that they faced related to implementing the HHFKA meal pattern requirements. These opportunities provided an avenue to share best practices, and to receive tailored technical assistance related to implementation of the new meal pattern standards (USDA Announces, 2015). The Skilled Helper model used to develop the workshop format allowed mentors and participants to complete peer-to-peer mentoring exercises that enabled them to share best practices, ideas, and solutions for operational issues/challenges, and to identify program goals and action steps to implement SN program improvements (Lartey-Rowser, M. & Nettles, M. F., 2016; USDA Announces, 2015).

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The Applied Research Division of the ICN conducted an evaluation of the Team Up initiative to assess the effectiveness of the Team Up workshops. Because the framework of the workshops included the use of an open forum to present and discuss best practices, as well as peer mentoring utilizing the Skilled Helper model, assessment of the effectiveness of the workshop included the evaluation of the self-efficacy and self-esteem of the program participants, as well as the evaluation of the workshop in terms of overall effectiveness and influence on participants' future behaviors.

This study was designed and conducted in two phases. In Phase I, a review of literature was conducted to draft items and questions related to the study's objectives. An expert panel with eight to ten SN professionals convened to review the items and questions drafted to identify the perceived value of participation in Team Up workshops. The expert panelists also reviewed potential survey stems to identify the outcomes of the specific, measurable, achievable, relevant, time-bound (SMART) goals and action plans developed during the workshop for the purpose of developing a national survey. The impact and outcome measures explored in this study included the following: self-efficacy, self-estimation, basic workshop features, comparison to other professional development opportunities, and overall impact of participation. The data collected from expert panelists was used to develop and pilot an electronic national survey in Phase II of the study. The initial survey was drafted, and a link to the survey was e-mailed to a national sample of Team Up participants (from six USDA regions) who attended regional workshops. The results of the survey were utilized to determine the perceived value of participation in the Team Up workshop, and to identify the outcomes of the SMART goals and action plans developed during the workshop.

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One-hundred and forty-four participants (37.5%) of the 382 SN professionals who participated in the Team Up workshops completed and submitted the survey, with a nearly even distribution over six USDA regions. The survey consisted of five specific measures: self-efficacy, self-esteem, program evaluation, participation evaluation, and workshop comparison. Descriptive data results for self-efficacy revealed that respondents were highly confident in their ability to perform tasks as a result of participating in the Team Up workshop. The mean for the self-esteem measure indicates that the participants' opinion of themselves and their skills and abilities, as it relates to completing tasks associated with participating in the Team Up workshop, are at high levels of agreement. The mean for program evaluation indicates that the participants agreed that the workshop met its specified goals and objectives. Participation evaluation results show that the participants agree that their participation in the Team Up workshop resulted in positive outcomes as it relates to expanding their network of peer professionals, and in allowing them to meet workshop goals and objectives once they return to their respective SN programs. The workshop comparison mean indicates that the Team Up workshop participants believe that the workshop was more useful, organized, and relatable to the needs of the participants than other similar workshops. Correlation results showed self-efficacy and self-esteem were significantly related, as expected. Self-efficacy was significantly positively correlated with program evaluation, participation evaluation, and workshop comparison. Similar results were noted for self-esteem, which was significantly correlated to program evaluation, participation evaluation, and workshop comparison.

The effect of participation in the Team Up workshop on self-esteem, self-efficacy, program evaluation, participation evaluation, and workshop comparison were based on these categorical predictor variables: education level, years of experience, job title/position, and workshop region. Results revealed a statistically significant difference in self-esteem by education level. A significant difference in self-efficacy was noted in the following areas: experience; job titles/positions; in program evaluation for SN directors and SN assistant director/area managers; in participation evaluation position; and in workshop comparison by position. There were no differences noted in any of the variables by region.

Overall, the results of this study show relationships between peer mentoring, self-efficacy, and self-esteem are important tools for producing positive outcomes with goal setting and goal attainment among SN administrators and leaders, particularly among SN directors. The Team Up model for peer mentoring has provided a new approach for assisting SN professionals in implementing federal regulations. These findings also show that peer mentoring has positive outcomes on self-efficacy, self-esteem, goal attainment, and new goal creation, which suggests a possible strategy for increasing self-efficacy and self-esteem among SN directors. The results of this study may be utilized to translate to other SN staff, and the participation in Team Up workshops may be used as a vessel to assist SN professionals in learning problem management skills. More research is needed to assess the impact of peer mentoring on work roles and job performance outcomes for SN professionals.

#### **INTRODUCTION**

The Healthy, Hunger-Free Kids Act (HHFKA) of 2010 reauthorized child nutrition programs, including the National School Lunch Program, the School Breakfast Program, the Summer Food Service Program, and the Afterschool Meal Program. This legislation made significant changes in budgets and resources associated with program operations, including meal reimbursement amounts and fees for paid lunches, as well as changes in nutrition standards in order for the programs to provide balanced meals and healthy foods. The changes in nutrition standards are as follows: increased fruit, vegetable, and whole grain provisions; access to free potable water during meal service; access to a variety of fluid milk based on recent Dietary Guidelines for Americans; and decreased sugar, trans fat, and sodium content in foods served to school-aged children (Healthy, Hunger Free Kids, 2010; Healthy, Hunger Free Summary, 2011).

While the HHFKA of 2010 offered promising outcomes for nutrition-related improvements in meals served to the nation's children, the introduction of this act was met with some opposition. This opposition came, in large part, from local school food authorities responsible for administering these programs, as well as child nutrition professional associations and advocacy groups, and food industry representatives (Woo Baidal & Taveras, 2014). Media outlets frequently reported on the anguish school nutrition (SN) workers and administrators were experiencing as a result of attempting to implement the new meal patterns established based on the HHFKA of 2010 (Aubrey, A, 2015; Halper, 2015).

Research on the outcomes of the HHFKA are varied. However, there has been some indications that while fruit and vegetable consumption did increase in students' consumption of school meals, participation rates, student acceptance, and food waste decreased. Cornish, Askelon, and Golembiewski (2016) assessed the impact of the new meal pattern standards

associated with the HHFKA of 2010 for rural SN directors. In this study, Cornish, et al. (2016) found that rural SN directors had similar concerns as those expressed through the media. When asked about their perceptions of the HHFKA, respondents shared negative perceptions about implementing the meal pattern requirements in the rural areas; concerns about portion size and meeting the needs of the student population; food waste; financial issues in meeting the meal pattern standard requirements; and decreases in participation. Additionally, respondents in this study indicated that the hardest HHFKA requirements to implement were increased vegetable requirements, identifying and serving affordable whole grains, enforcing sodium restrictions, and calorie restrictions. Other studies looked beyond the anecdotal information to identify formal methods to evaluate the impact of the HHFKA on school meals and also found varied results. A majority of the research conducted found that there were more benefits than disadvantages to the new meal pattern standards. Nevertheless, some issues were identified. Johnson, Podrabsky, Rocha, and Otten (2016) found a 1% decrease in student participation in school meals after the implementation of the HHFKS. Cohen, Richardson, Parkerm, Catlano, and Rimm (2013) found no significant difference in the amount of fruit consumed pre- and post-implementation.

Because of the expressed need to move forward with the implementation of the HHFKA of 2010 meal pattern standards and requirements, the USDA Food and Nutrition Services partnered with the Institute of Child Nutrition (ICN), state agencies, and allied organizations to pilot and roll out nationwide an initiative designed to offer opportunities for SN professionals to share best practices, participate in peer-to-peer mentoring, and receive tailored technical assistance related to implementation of the new meal pattern standards (USDA Announces, 2015). This initiative, *Team Up for School Nutrition Success* (Team Up), consisted of a series of two-day, face-to-face regional workshops that used a counseling model to create a structured

environment to encourage SN professionals to share issues, challenges, or missed opportunities that they faced related to implementing the HHFKA meal pattern requirements. The model allowed workshop mentors and participants to share ideas and solutions to operational issues/challenges, and to identify program goals and action steps to implement SN program improvements (Lartey-Rowser, M. & Nettles, M., 2016; USDA Announces, 2015).

The impetus of the Team Up initiative consists of a framework designed to allow sharing best practices and networking with other SN professionals through the use of peer-to-peer mentoring. At each Team Up workshop, SN directors would share best practices through presentations in an open forum with other SN directors. Immediately following the best practice presentations, SN directors would participate in peer-to-peer mentoring. The peer mentoring process was based on a problem management model called the Skilled Helper model. Mentors were trained to use the model to assist fellow SN directors systematically in sharing operational challenges and in identifying solutions. The mentoring process also provided networking opportunities for fellow SN directors to connect with like-minded individuals who have similar SN programmatic experiences (Lartey-Rowser, M. & Nettles, M. F., 2016).

The typical definition of mentoring is either a formal or informal relationship between a supervisor, senior staff member, or more experienced worker, and a junior, less-experienced protégé, where career and professional development are the priority. However, the Team Up initiative expanded the mentoring concept to peer relationships, where the hierarchical dimension of pure mentoring is eliminated. This allowed for mutual support, teamwork, and improved communications through a peer mentoring relationship (Kram & Isabella, 1985; Smith, Howard, & Harrington, 2005). In addition, Team Up was not created to develop careers, but to develop solutions to problems SN directors face at the local SN program level. The Skilled Helper model

was selected as the framework for the peer-to-peer mentoring because of its cognitive, behavioral, solution-focused approach to addressing issues and challenges

(Connor & Pokora, 2008).

The Skilled Helper model is a counseling approach used by counselors and therapists to offer client-focused discussions that result in life-enhancing outcomes based on a collaborative relationship between the client and the helper (or counselor/therapist). The model provides a structured and solution-focused method for addressing problematic situations and missed opportunities through effective decision making, through setting goals, and through establishing an action plan (Egan 2014). It has been proposed that the Skilled Helper model is underpinned by several theories: Carkhuff's theory of high-level functioning helpers, which proposes empathy, respect, and immediacy are effective; Strong's social influence theory, in which the client is influenced by the power of the helper as the helper operates in a sphere of collaboration, empowerment and democracy; and Bandura's social learning theory, where the clients are learning and developing self-efficacy and expecting to achieve goals through the use of newly-acquired skills and behaviors (Egan, 2014; Jenkins, 1999; Nelson, n.d.). These theories impart positive relational behaviors that empower individuals with similar experiences to address issues and to find resolutions.

The implementation of the HHFKA required SN programs to make various healthful changes. Although many perceived these changes to be challenging, SN professionals are faced with meeting those challenges daily. Establishing procedures, implementing, and evaluating school foodservice operational changes are impacted by a variety of factors. Research supports that an individuals' beliefs related to change are primary factors that influence their behaviors and actions to complete goals. According to the Social Learning Theory (SLT), behavior and

one's environmental influences create interactions, and impacts how individuals think about their capabilities to construct reality, self-regulate, process information, and perform behaviors (Bandura, 1986). This theory is considered to not only be a personal factor, but also as a social construct, because individuals operate collectively with others as well as on their own. As a part of the SLT, individuals' or groups' higher belief or self-efficacy is associated with self-motivation, and the premise being that they are more likely to initiate actions to reach their goals and other achievements.

Self-efficacy influences both individual and group decisions and choices, and has an impact on confidence to sustain new changes. Research has shown that individuals/groups with a higher self-efficacy are more likely to achieve goals than those with lower self-efficacy (Bandura, 1986). Many constructs of the SLT are similar to those of the Skilled Helper model for the Team Up framework, which also uses a group dynamic for mentoring among individuals who share similar experiences (Egan, 2014). This group dynamic supports Bandura's SLT construct that individuals' shared beliefs and experiences and positive environmental conditions create interactions that can have an impact on SN professionals' confidence to create realistic goals and action plans that they believe are achievable in the workplace (Bandura, 1986).

# **Research Objectives**

The main purpose of the Team Up initiative was to accomplish the following goals:

- To provide technical support to address SN program issues and challenges;
- To allow for networking opportunities among SN directors to expand knowledge base and resource base; and
- To offer effective peer mentoring in a formalized manner to assist SN directors in developing goals and action plans to guide the direction of their programs.

In order to gather evidence on the effectiveness of the Team Up initiative, the Applied Research Division of the ICN conducted an evaluation on the outcomes of the Team Up initiative for participants in the workshop. Because the framework of the workshop included the use of an open forum to present and discuss best practices and peer mentoring utilizing the Skilled Helper model, assessment of the effectiveness of the workshop included the evaluation of the self-efficacy and self-esteem of the program participants, as well as the evaluation of the workshop in terms of overall effectiveness and influence on participants' future behaviors.

## METHODOLOGY

#### **Research Design**

The purpose of this study was to examine the effectiveness of the Team UP for School Nutrition Success (Team Up) workshop by assessing school nutrition (SN) participants' self-esteem and self-efficacy. This study also investigated the workshop in terms of overall effectiveness and influence on participants' future behaviors to identify the outcomes of the specific, measurable, achievable, relevant, time-bound (SMART) goals and action plans developed during the workshop. A two-phased research design was implemented to meet study objectives. In Phase I, researchers conducted a review of literature to draft items and questions related to the research objectives. An expert panel with eight to ten SN professionals convened to identify the perceived value of participation in Team Up workshops, and to identify the outcomes of the SMART goals and action plans developed during the workshops, for the purpose of developing a national survey. The impact and outcome measures explored in this study included self-efficacy, self-estimation, basic workshop features, comparison to other professional development opportunities, and overall impact of participation. The information was used to develop and pilot an electronic national survey in Phase II of the study. The draft survey was developed from the expert panel data and formatted as an electronic instrument that was piloted by panelists to confirm outcome measures confirmed from their discussions and review of literature. The final survey was assigned a hyperlink on SurveyMonkey, and was e-mailed to a national sample of Team Up participants representing six United States Department of Agriculture (USDA). The results of the survey were utilized to determine the perceived value of participation in Team Up workshops, and to identify the outcomes of the SMART goals and action plans developed during the workshops.

#### Institutional Review Board Approval and Informed Consent

The University of Southern Mississippi's Human Subjects Protection Review Committee approved the protocol for Phase I and Phase II of this research study. All expert panel and review panel members in Phase I of this study received informed consent statements, and agreed to participate by attending the work group session and submitting the review panel survey online, which served as their consent in the study. In Phase II, an informed consent statement was included in the e-mail request to participants to access the survey link, to complete the survey, and submit it. Completion and submission of the survey served as participants' consent to participate in the study. Contact information for the researchers and the Institutional Review Board was provided on the requests to participate in every facet of the study.

#### **Phase I - Expert Panel Session**

Expert panel members were chosen from a pool of SN professionals who participated in the Team Up workshop. A list of potential expert panel members was compiled from six USDA regions, and 12 panelists were identified from the pool of contacts to participate in the panel discussion session. An invitation was sent via e-mail to 12 potential panelists to attend a day-and-a-half meeting to discuss the outcomes of the SMART goals and action plans developed during the workshop, and to respond to the items/questions related to the Team Up workshop. Invitees were from six USDA regions, based upon their Team Up workshop experience and their related activities after the workshop.

Ten potential members who agreed to participate were sent confirmation e-mails containing additional information on the upcoming expert panel session and travel arrangements. Once expert panel members confirmed their arrangements, all preparations for the expert panel discussions and structured discussion protocol were completed. The expert panel session took place over a day-and-a-half on the campus of The University of Southern Mississippi. The session was facilitated by two trained researchers; one acted as moderator, while the other served as the recorder. The agenda for the session was planned to address the research objectives and to guide the discussion. Panel members were asked semi-structured, open-ended questions designed to explore issues related to the perceived value of participation in Team Up workshops, and to identify the outcomes of the SMART goals and action plans developed during the workshops.

After the session, all notes were transcribed, and the researcher formatted the information by thematically-coding the data into survey stems related to the research objectives. The draft survey was sent to the expert panel via a survey link through e-mail to confirm the information from the discussions and pilot the instrument. Nine expert panel members who attended the discussion session responded to the e-mail, and confirmed the information by completing and submitting the draft survey as data collected during the expert panel. The researcher then made revisions in preparation for creating a draft quantitative survey for the second phase of the study.

#### Phase II

#### Survey Development

In Phase II of the study, themes identified from the review of literature, the Team Up workshop materials, and qualitative data collected from the expert panel discussions were used to develop a survey instrument to identify the perceived value of participation, and to identify the outcomes of the SMART goals and action plans developed during the workshop. The draft survey, *Regional Team Up Workshop Evaluation Survey PILOT*, consisted of five sections: self-efficacy (10 questions); self-esteem (10 questions); program evaluation and observations (14 questions); workshop comparison (9 questions); and demographics (4 questions). In the first section of the survey, participants were asked to rate their perceived level of self-efficacy to 10

items about their own belief in their abilities to perform specific activities and/or achieve an outcome after attending the regional Team Up workshop. The items were based upon a 10-point scale that ranged from 1 (*cannot do at all*) to 10 (*definitely can do*).

The second section of the survey asked participants to rate their level of agreement to 10 perceived self-esteem items. This section assessed participants' perceptions about themselves and their abilities to perform specific activities after attending the regional Team Up workshop. The items were based upon the following 4-point scale: 1 (*strongly disagree*), 2 (*disagree*), 3 (*agree*), and 4 (*strongly agree*). The third section of the survey, program evaluation and observations, contained two subsections that asked participants to rate their perceptions and observations about their regional Team Up workshop experiences. The first sub-section contained 10 items about participants' workshop experiences and were based upon the following 4-point scale: 1 (*strongly disagree*), 2 (*disagree*), 3 (*agree*), and 4 (*strongly agree*). The second sub-section consisted of four items that asked participants about activities they have performed after attending the Team Up workshop. These items were based on the following 4-point scale: 1 (*strongly disagree*), 3 (*agree*), and 4 (*strongly agree*).

The fourth section of the survey, workplace comparison, asked participants to compare their Team Up workshop experiences to other professional workshops. The nine items were based upon a 4-point scale: 1 (*strongly disagree*), 2 (*disagree*), 3 (*agree*), and 4 (*strongly agree*). The demographic section was the fifth and final section of the draft survey that consisted of four items that asked participants to share their professional characteristics related to their current job position, years of experience in their position, level of education, and geographical region in which they work.

## Survey Draft Review

A review panel e-mail with a link to the draft survey was sent for evaluation to former expert panelists and USDA representatives prior to sending it out to review panelists in the southeast region. The review panel e-mail explained the purpose of the study, and gave instructions for accessing the survey, reviewing the survey instructions for clarity, and the survey instrument. Reviewers' comments and suggestions were compiled and utilized to revise the survey into the draft instrument that was piloted in the USDA's southeast region.

#### Survey Instrument Pilot

Fifty-three participants from the USDA southeast region who participated in the regional Team Up workshop were sent an e-mail requesting their participation in the review of the pilot survey. Participants were given one week to complete the pilot survey. Nine e-mails were returned as undeliverable. A total of 18 of 53 surveys were completed and submitted for analysis. Three participants provided additional comments for instructions, and responded that the survey took eight to 10 minutes to complete. There were no suggestions to change the sections or items of the survey. The minor changes were completed and the final instrument was assigned a link on SurveyMonkey for the national survey.

#### **Data Analysis**

Surveys were analyzed using the statistical package SPSS Version 24.0 for Windows. Descriptive statistics included means, standard deviations, frequencies, and percentages of total responses and inferential statistics included ANOVAs.

# **RESULTS AND DISCUSSION**

# **National Survey**

#### Survey Response Results and Participants' Personal and Program Demographics

Thirty-nine percent (39%) of the 382 school nutrition (SN) professionals responded to the survey. One hundred and forty-four participants (37.5%) completed the entire survey. Frequencies and percentages of demographic variables are displayed in Table 1. The majority of the respondents (76.4%) were SN directors with one to five years of experience in their current position (66.7%). Others (9%) included such positions as dietitians, superintendents, administrators, and record keepers. The majority of the respondents (41.7%) indicated their highest level of education was a high school diploma or GED. This was followed by bachelor's degree (28.5%). Respondents were nearly evenly distributed among the six United States Department of Agriculture (USDA) regions represented in this study, with 16% of respondents from the Western region, 16.7% from the Mountain Plains region, 16% from the Midwest region, 13.2% from the Northeast region, 18.1% from the Mid-Atlantic region, and 18.8% from the Southwest region.

Table 1

Variable	Frequency	Valid Percent
Position		
School nutrition director	110	76.4
School nutrition assistant director/area manager	8	5.6
School nutrition manager/supervisor	17	11.8
Other	9	6.3
Experience		
Less than 1 year	1	0.7
1-5 years	96	66.7
6-10 years	20	13.6
11-15 years	7	4.9
6-20 years	12	8.3
Longer than 20 years	8	5.6
Education		
High school diploma or GED	60	41.7
Associate's degree	23	16.0
Bachelor's degree	41	28.5
Master's degree	17	11.8
Graduate credits beyond master's degree	3	2.1
Region		
Western	23	16.0
Mountain Plains	24	16.7
Midwest	23	16.0
Northeast	19	13.2
Mid-Atlantic	27	18.8
Southwest	28	19.4

Personal and Program Demographics (N=144)

# Self-Efficacy, Self-Esteem, Program Evaluation, Participation Evaluation, and Workshop Comparison

Within the survey for those who participated in the *Team Up for School Nutrition Success* (Team Up) workshop, there were five specific measures. The measures included self-efficacy, self-esteem, program evaluation, participation evaluation, and workshop comparison.

The self-efficacy scale is a 10-item measure, assessed by a ten-point Likert scale that ranged from 1 (cannot do at all) to 10 (definitely can do). The Cronbach's alpha for this scale was .944, with no items as a candidate for deletion. The self-esteem scale consisted of 10 items. It was assessed by the following four-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). As the internal consistency reliability coefficient for the 10 items in this study was .833, no item was a candidate for deletion. However, for analysis purposes, items 3, 5, and 8 in this scale were reversed in polarity or direction. (See Table 3 for a description of the items). The program evaluation scale is a 10-item measure, assessed by the following four-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). As the Cronbach's alpha for this scale was .917, no item was a candidate for deletion. The participation evaluation scale is a 4-item measure. It was assessed by the following four-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). The participation evaluation scale yielded a Cronbach's alpha of .806, so no item was a candidate for deletion. The workshop comparison scale, consisting of 9 items, was assessed by the following four-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). The workshop comparison scale yielded a Cronbach's alpha of .898, so no item was a candidate for deletion. The internal consistency measures for self-efficacy, self-esteem, program evaluation,

participation evaluation, and workshop comparison were deemed sufficient for use of the instrument.

# Self-Efficacy, Self-Esteem, Program Evaluation, Participation Evaluation, and Workshop Comparison Results

The results from the five measures for the evaluation of the Team Up workshop indicated that the participants benefited from attending the workshop in each category. Table 2 shows the descriptive data for the following measures: self-esteem, self-efficacy, program evaluation, participation evaluation, and workshop comparison.

## Table 2

Descriptive Data for All Measure	All Measures	for	Data	ptive	Descri	D
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	Means (Standard Deviations)	Minimum	Maximum
Self-Efficacy	8.08 (1.59)	3.40	10.0
Self-Esteem	3.56 (0.42)	2.20	4.0
Program Evaluation	3.43 (0.43)	2.60	4.0
Participation Evaluation	3.15 (0.57)	1.00	4.0
Workshop Comparison	3.41 (0.44)	2.33	4.0

*Note:* The self-efficacy scale was a 10-point Likert scale with 1 (*cannot do at all*) to 10 (*definitely can do*). The self-esteem scale, program evaluation, participation evaluation, and workshop comparison scale was a 4-point Likert scale with 1 (*strongly disagree*) to 4 (*strongly agree*) each.

The mean for self-efficacy (M = 8.08) shows that participants believe that as a result of participating in the Team Up workshop, they are highly confident in their ability to perform tasks associated with the workshop. The mean of all 10 items are seven (7) or greater. (See Table 3.) The highest item was Item 5 (M = 8.79) and the lowest was Item 10 (M = 7.20).

Item	Means	Standard Deviations	Minimum	Maximum
Item 1: Participate in group discussions to identify your SN program needs?	8.72	1.62	4.0	10.0
Item 2: Develop specific, measurable, achievable, relevant, time-bound (SMART) goals to meet your specific program needs?	8.13	1.77	4.0	10.0
Item 3: Create action plans for each of the SMART goals established?	8.01	1.85	4.0	10.0
Item 4: Organize a plan of action to improve aspects of your SN program?	8.18	1.67	4.0	10.0
Item 5: Network with peers to gain knowledge and information?	8.79	1.87	1.0	10.0
Item 6: Motivate yourself to complete tasks related to SMART goals and action plans?	8.09	1.91	2.0	10.0
Item 7: Motivate others to complete tasks related to SMART goals and action plans?	7.69	2.01	2.0	10.0
Item 8: Complete tasks related to SMART goals and action plans by a specific time?	7.96	1.84	2.0	10.0
Item 9: Share SMART goals and action plans that address issues and/or challenges in your SN program?	8.02	1.99	1.0	10.0
Item 10: Contact Team Up mentors and/or participants that you met at the workshop?	7.20	2.74	1.0	10.0

Table 3

Means and Standard Deviations for Self-Efficacy

Note. The scale for self-efficacy was a 10-point Likert scale ranging from 1 (cannot do at all) to 10 (definitely can do).

The mean for the self-esteem measure (M = 3.36) indicates that the participants' opinion of themselves and their skills and abilities, as they relate to completing tasks associated with participating in the Team Up workshop, are at high levels of agreement. Table 4 shows the means for all 10 self-esteem items. The items are 3.0 or greater, with Item 1 (M = 3.70) having the highest mean and Item 8 (M = 3.09) having the lowest mean.

Table 4

Item	Means	Standard Deviations	Minimum	Maximum
Item 1: I am confident that I can plan school meals that meet meal pattern requirements.	3.70	0.54	1.00	4.00
Item 2: I am confident that I can plan school meals to meet student preferences.	3.45	0.58	1.00	4.00
Item 3: I do not feel that I am able to achieve the SMART goals I set. <sup>a</sup>	3.28	0.71	1.00	4.00
Item 4: I am confident that I can lead my team to complete the SMART goals and action plans I created.	3.20	0.61	1.00	4.00
Item 5: I do not have the knowledge and skills to follow through with the action plans I created. <sup>a</sup>	3.27	0.77	1.00	4.00
Item 6: I feel that I can mentor staff successfully to establish SMART goals and action plans.	3.27	0.64	1.00	4.00

Means and Standard Deviations for Self-Esteem

*Note:* The scale for self-efficacy was a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). <sup>a</sup>Items 3, 5, and 8 are reversed.

(Table 4 continues)

# (Table 4 continued)

Item	Means	Standard Deviations	Minimum	Maximum
Item 7: I feel that I can mentor peers successfully to establish SMART goals and action plans.	3.19	0.68	1.00	4.00
Item 8: I am not confident that I can analyze my SN program and develop additional SMART goals and action plans for continuous improvement. <sup>a</sup>	3.09	0.83	1.00	4.00
Item 9: I am confident that I can discuss the SN program with my district administration.	3.56	0.61	1.00	4.00
Item 10: I am confident that I can ask my peers for assistance.	3.55	0.62	1.00	4.00

## Means and Standard Deviations for Self-Esteem

*Note:* The scale for self-efficacy was a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). <sup>a</sup>Items 3, 5, and 8 are reversed.

The mean for program evaluation (M = 3.43) indicates that the participants agreed that the workshop met its specified goals and objectives to provide topical discussion that met the general needs of participants in the areas of SN programs, provided quality presenters and presentations, properly explained workshop design, provided support to work through workshop design, and provided adequate time to discuss issues and challenges and to network with fellow attendees. The means for all ten items are greater than three. The highest mean was for Item 9 (M = 3.61) and the lowest mean was for Item 5 (M = 3.26). Table 5 shows the descriptives for program evaluation.

Item	Means	Standard Deviations	Minimum	Maximum
Item 1: Covered topics that met my specific SN program needs.	3.54	0.58	2.00	4.00
Item 2: Provided best practice panel presentations that shared challenges and successes experienced by SN professionals.	3.46	0.54	2.00	4.00
Item 3: Provided quality presentations that were informative and useful for SN directors.	3.52	0.53	2.00	4.00
Item 4: Offered realistic best practices that I can use for my SN program.	3.42	0.56	2.00	4.00
Item 5: Provided an explanation of the Skilled Helper Model that was easy to understand.	3.26	0.61	1.00	4.00
Item 6: Provided a user-friendly workbook.	3.45	0.53	2.00	4.00
Item 7: Provided adequate time to discuss the issues and challenges related to the topics.	3.29	0.65	1.00	4.00
Item 8: Helped me develop SMART goals and action plans to address challenges I face in my SN program.	3.35	0.58	1.00	4.00
Item 9: Provided an opportunity to network with other SN professionals.	3.61	0.57	1.00	4.00
Item 10: Provided an opportunity to network with allied organizations and learn about their resources.	3.51	0.55	2.00	4.00

# Table 5

Note: The scale for self-efficacy was a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree).

Table 6 depicts the participation evaluation means. The overall means for participation evaluation (M= 3.15) shows that the participants agree that the participation in the Team Up workshop resulted in positive outcomes related to expanding their network of peer professionals and allowing them to meet workshop goals and objectives once they return to their respective SN programs. The means of all four items under participation evaluation were greater than 2.9. The lowest mean was Item 4 (M = 2.9) and the highest mean was Item 1 (M = 3.33).

Table 6

Item	Means	Standard Deviations	Minimum	Maximum
Item 1: I have met at least one new SN professional I can contact about my SN program.	3.33	0.69	1.00	4.00
Item 2: I have expanded my network of SN professionals.	3.31	0.75	1.00	4.00
Item 3: I have successfully implemented the action plans I developed to achieve my SMART goals.	3.01	0.69	1.00	4.00
Item 4: I have developed new SMART goals and action plans upon returning to my SN program.	2.94	0.69	1.00	4.00

Means and Standard Deviations for Participation Evaluation

Note: The scale for self-efficacy was a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree).

Participants in this study were asked to compare the Team Up workshop to other workshops they have attended. The workshop comparison mean (M = 3.41) indicates that the Team Up workshop participants believe that the workshop was more useful, organized, and relatable to the needs of the participants than other similar workshops. Means of all nine items were greater than 3.0. Table 7 illustrates the descriptive data for workshop comparison. The

highest mean was Item 9 (M = 3.59) and the lowest mean was Item 8 (M = 3.09).

Means and Standard Deviations for Workshop Comparison

Item	Means	Standard Deviations	Minimum	Maximum
Item 1: The content was well organized and the instructions were easy to follow.	3.57	0.51	2.00	4.00
Item 2: The Team Up panelists were well prepared and able to respond to questions that relate to the challenges that I face.	3.57	0.54	2.00	4.00
Item 3: The regional Team Up workshop covered topics that were relevant to me.	3.50	0.55	2.00	4.00
Item 4: The time allotted for the Team Up workshop was sufficient.	3.33	0.60	2.00	4.00
Item 5: The Team Up workbook and other materials are useful tools that I still use today.	3.26	0.71	1.00	4.00
Item 6: The Team Up workshop provided usable resources that I can apply in my SN program.	3.42	0.55	2.00	4.00
Item 7: The Team Up workshop model of panels followed by breakout sessions was most useful.	3.39	0.57	2.00	4.00
Item 8: The Team Up workshop changed how I address challenges in my SN program.	3.09	0.71	1.00	4.00
Item 9: The Team Up workshop facilities and rooms were adequate and comfortable.	3.59	0.54	2.00	4.00

Note: The scale for self-efficacy was a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree).

Table 7

# Correlations Results Among Self-Efficacy, Self-Esteem, Program Evaluation, Participation Evaluation, and Workshop Comparison Measures

To examine the relationships between all scales within the survey, correlations were conducted with all measures. Table 8 shows the correlations between all the variables in this study. As expected, self-efficacy and self-esteem were significantly correlated, r = .714, p < .01. Additionally, self-efficacy was significantly positively correlated with program evaluation, participation evaluation, and workshop comparison. Self-esteem was positively significantly correlated to program evaluation, participation evaluation, and workshop comparison.

# Table 8

	Self-Efficacy	Self-Esteem	Program Evaluation	Participation Evaluation	Workshop Comparison
Self-Efficacy		.714 <sup>a</sup>	.578 <sup>a</sup>	.508 <sup>a</sup>	.492 <sup>a</sup>
Self-Esteem	.714 <sup>a</sup>		.627 <sup>a</sup>	.510 <sup>a</sup>	.517 <sup>a</sup>
Program Evaluation	.578ª	.627 <sup>a</sup>		.644 <sup>a</sup>	.781 <sup>a</sup>
Participation Evaluation	.506 <sup>a</sup>	.510ª	.644 <sup>a</sup>		.684ª
Workshop Comparison	.492ª	.517ª	.781ª	.684ª	

#### Correlations Data for All Measures

 ${}^{a}p < .01$ 

# Team Up for School Nutrition Success Workshop Participation Effectiveness on Self-Esteem, Self-Efficacy, Program Evaluation, Participation Evaluation, and Workshop Comparison Results by Demographic Variables

In order to examine the effect of participation in the Team Up workshop on self-esteem, self-efficacy, program evaluation, participation evaluation, and workshop comparison based on specific variables, one-way ANOVAs were conducted with each categorical predictor variable. These variables were education level, years of experience, job title/position, and workshop region.

# Education

For education level, the participants were divided into five groups: high school diploma or GED, associate's degree, bachelor's degree, master's degree, and graduate credits beyond master's degree. The one-way ANOVA revealed a statistically significant difference in self-esteem by educational level, F(4, 139) = 3.29, p = .01. The effect size, calculated using eta squared, was .09, lending itself to medium effect. Post-hoc comparison using the Tukey HSD test indicated that the mean score for associate's degree (M = 3.56, SD = .28) was higher than the mean score for high school diploma or GED (M = 3.24, SD = .43). Table 9 shows the means for self-esteem. There was no statistically significant difference in mean scores between the other measures and education level.

# Table 9

Education	n	Means	Standard Deviations	Minimum	Maximum
High school diploma or GED	60	3.24	.43	2.20	4.00
Associate's degree	23	3.56	.28	3.00	4.00
Bachelor's degree	41	3.36	.42	2.40	4.00
Master's degree	17	3.51	.34	3.00	4.00
Graduate credits beyond Masters	3	3.23	.74	2.40	3.80
Total	144	3.36	.42	2.20	4.00

# Means and Standard Deviations for Self-Esteem by Education Level

# Experience

The participants' years of experience on the job were divided into five groups: 1-5 years, 6-10 years, 11-15 years, 16-20 years, and longer than 20 years. A one-way ANOVA was conducted to compare the impact of self-efficacy, self-esteem, program evaluation, participant evaluation, and workshop comparison by the participants' number of years' experience. There was a significant difference in self-efficacy by experience, F(4, 139) = 4.097, p < .004. The effect size, calculated using eta squared, was .11, lending itself to medium effect. Post-hoc comparisons using Tukey HSD test indicated that the mean score for 16-20 years' experience (M = 9.31, SD = .48) was significantly higher than 1-5 years' experience (M = 7.89, SD = 1.66) and longer than 20 years' experience (M = 7.08, SD = 1.45). Table 10 shows the means for

self-efficacy and years of experience. There was no statistically significant difference in mean scores between the other measures and years' experience.

#### Table 10

Years of Experience	n	Means	Standard Deviations	Minimum	Maximum
1-5 years	97	7.89	1.66	3.40	10.00
6-10 years	20	8.61	1.33	5.40	10.00
11-15 years	70	8.80	1.28	6.90	10.00
16-20 years	12	9.31	.48	8.40	10.00
Longer than 20 years	80	7.08	1.45	4.60	8.60
Total	144	8.11	1.59	3.40	10.00

# Means and Standard Deviations for Self-Efficacy by Years of Experience

#### **Job Title or Position**

Participants' job title or position was divided into four groups: School nutrition director, SN assistant director/area manager, SN manager/supervisor, and Other. Other consisted of eight titles: administrator, dietitian/menu planner, director of residential facility, foodservice coordinator, foodservice director, SN record keeper, superintendent, and trainer. A one-way ANOVA was conducted to compare the impact of the participants' job title on the five measures of self-efficacy, self-esteem, program evaluation, participant evaluation, and workshop comparison. There was a statistically significant difference in overall self-esteem by job titles, F(3, 140) = 5.37, p = .002. The actual difference in mean scores between groups was medium. The effect size, calculated using eta squared, was .12. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for SN directors (M = 3.41, SD = .39) was significantly different from SN managers/supervisors (M = 3.02, SD = .49). (See Table 11.)

There was also a statistically significant difference in overall self-efficacy for three job title groups F(3, 140) = 7.89, p < .001. The effect size, calculated by eta squared, was .16, indicating a large effect. Post-hoc comparison using the Tukey HSD test showed that the mean score for SN directors (M = 8.35, SD = 1.41) was significantly different from the SN assistant directors/area managers (M = 6.69, SD = 1.45) and the SN managers/supervisors (M = 6.87, SD = 1.97). Likewise, the Post-hoc comparison indicated that the mean score for other (positions) (M = 8.76, SD = 1.47) was significantly higher than SN assistant directors/area managers (M = 6.69, SD = 1.45) and SN managers/supervisors (M = 6.87, SD = 1.97). (See Table 12.)

Table 11

Job Title/Position	n	Means	Standard Deviations	Minimum	Maximum
School Nutrition Director	110	3.41	.39	2.30	4.00
School Nutrition Assistant Director/Area Manager	8	3.19	.31	3.00	3.90
School Nutrition Manager/Supervisor	17	3.02	.49	2.20	4.00
Other	9	3.44	.48	2.40	4.00
Total	144	3.56	.42	2.20	4.00

Means and Standard Deviations for Self-Esteem by Job Title/Position

# Table 12

Job Title/Position	n	Means	Standard Deviations	Minimum	Maximum
School Nutrition Director	110	8.35	1.41	3.15	10.00
School Nutrition Assistant Director/Area Manager	8	6.69	1.45	4.90	10.00
School Nutrition Manager/Supervisor	17	6.87	1.97	3.40	10.00
Other	9	8.76	1.47	6.10	10.00
Total	144	8.11	1.59	3.40	10.00

## Means and Standard Deviations for Self-Efficacy by Job Title/Position

There was a statistically significant difference in program evaluation for SN directors and SN assistant director/area managers, F(3, 140) = 3.98, p = .009. The effect size, calculated using eta squared, was .08. Therefore, the difference in mean scores between the groups showed medium effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for SN directors (M = 3.49, SD = .42) was significantly higher than SN assistant director/area managers (M = 3.03, SD = .27). (See Table 13.)

Job Title/Position	n	Means	Standard Deviations	Minimum	Maximum
School Nutrition Director	110	3.49	.42	2.60	4.00
School Nutrition Assistant Director/Area Manager	8	3.03	.27	2.70	3.60
School Nutrition Manager/Supervisor	17	3.27	.48	2.80	4.00
Other	9	3.46	.39	2.70	4.00
Total	144	3.43	.43	2.60	4.00

### Means and Standard Deviations for Program Evaluation by Job Title/Position

There was a statistically significant difference in participation evaluation position, F(3, 140) = 3.49, p = .018. The effect size, calculated using eta squared, was .07. Therefore, the difference in mean scores between the groups showed medium effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for other (M = 3.39, SD = .52) was significantly different from SN assistant director/area managers (M = 2.63, SD = .50). There was also a significant difference in participation evaluation between SN directors and SN assistant directors/area managers. The Post-hoc comparisons using the Tukey HSD test indicated that the mean score for SN directors (M = 3.19, SD = .56) was significantly higher than SN assistant director/area managers (M = 2.63, SD = .50). (See Table 14.)

Job Title/Position	п	Means	Standard Deviations	Minimum	Maximum
School Nutrition Director	110	3.19	.56	1.00	4.00
School Nutrition Assistant Director/Area Manager	8	2.63	.50	2.00	3.50
School Nutrition Manager/Supervisor	17	3.01	.56	2.00	4.00
Other	9	3.39	.52	2.25	4.00
Total	144	3.15	.57	1.00	4.00

Means and Standard Deviations for	for Participation Evaluation by Job Title/Position	0n
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There was a statistically significant difference in workshop comparison by position,

F(3, 140) = 2.98, p = .034. The effect size, calculated using eta squared, was .06. Therefore, the difference in mean scores between the groups showed medium effect. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for SN directors (M = 3.45, SD = .44) was significantly higher than the SN assistant directors/area managers (M = 3.03, SD = .38). (See Table 15.)

Job Title/Position	n	Means	Standard Deviations	Minimum	Maximum
School Nutrition Director	110	3.45	.44	2.33	4.00
School Nutrition Assistant Director/Area Manager	8	3.03	.38	2.56	3.67
School Nutrition Manager/Supervisor	17	3.29	.46	2.67	4.00
Other	9	3.53	.35	3.00	4.00
Total	144	3.41	.44	2.33	4.00

## Means and Standard Deviations for Workshop Comparison by Job Title/Position

### **United States Department of Agriculture Region**

Participants were divided into groups based on the USDA region in which they attended the Team Up workshop. Those regions were the Western region, Mountain Plains region, Midwest region, Northeast region, Mid-Atlantic region, and Southwest region. The one-way ANOVA revealed that there was no statistically significant difference in self-efficacy, self-esteem, program evaluation, participation evaluation, and workshop comparison based on region.

## **Effects of the Workshop**

To determine the overall effect of workshop objectives and activities on attendees, specific questions within the survey were analyzed. These questions addressed the goals of the workshop: to provide technical support to address SN program issues and challenges; to allow for networking opportunities among SN directors to expand knowledge base and resource base; and to offer effective peer mentoring in a formalized manner to assist SN directors in developing goals and action plans to guide the direction the program should take. The questions included in the analysis of the effect of the workshop objectives and activities included all questions under the participation evaluation section (Items 1-4), and one question under the workshop section (Item 8):

- Item 1: I have met at least one new SN professional I can contact about my SN program.
- Item 2: I have expanded my network of SN professionals.
- Item 3: I have successfully implemented the action plans I developed to achieve my SMART goals.
- Item 4: I have developed new SMART goals and action plans upon returning to my SN program.
- Item 8: The Team Up workshop changed how I address challenges in my SN program.

Frequencies and percentages of the effect of attending the Team Up workshop are contained in Table 16.

Of the 144 participants surveyed, 89.6% of the respondents agreed with Item 1 under the participation evaluation section. Additionally, 85.4% of respondents agreed with Item 2. For Item 3, 81.9% of respondents indicated agreement. The final item under participation evaluation indicated that 78.5% of the respondents agreed with Item 4. Of the 144 participants surveyed, 80.6% of the respondents also agreed with Item 8. All of these questions yielded a significant difference.

Variable	Frequency	Valid Percent	
Participation Evaluation			
tem 1: I have met at least one			
new SN professional I can			
contact about my SN program.			
Strongly Disagree	2	1.4	
Disagree	13	9.0	
Agree	64	44.4	
Strongly Agree	65	45.1	
Item 2: I have expanded my			
network of SN professionals.			
Strongly Disagree	2	1.4	
Disagree	19	13.2	
Agree	56	38.9	
Strongly Agree	67	46.5	
Item 3: I have successfully			
mplemented the action plans I			
leveloped to achieve my			
SMART goals.			
Strongly Disagree	4	2.8	
Disagree	22	15.3	
Agree	87	60.4	
Strongly Agree	31	21.5	
tem 4: I have developed new			
SMART goals and action plans			
upon returning to my			
SN program.			
Strongly Disagree	4	2.8	
Disagree	27	18.8	
Agree	86	59.7	
Strongly Agree	27	18.8	

Frequencies and Percentages of the Effect of Attending Team Up for School Nutrition Success (N=144)

(Table 16 continues)

### (Table 16 continued)

Variable	Frequency	Valid Percent	
Workshop Comparison			
Item 1: I have met at least one			
new SN professional I can			
contact about my SN program.			
Strongly Disagree	1	.7	
Disagree	27	18.8	
Agree	73	50.7	
Strongly Agree	43	29.9	

*Frequencies and Percentages of the Effect of Attending Team Up for School Nutrition Success (N=144)* 

Previous research has shown the impact of mentoring on career development and personal development (Kram & Isabella, 1985). The purpose of the Team Up initiative was to provide mentoring opportunities for career development in terms of generating new ideas to impact SN program operations, and for personal development by empowering SN administration and leaders. The current research study is one of the first to review the impact of mentoring on SN administration and leadership. The results from this study suggest that mentoring is a useful tool for addressing challenges, issues, and missed opportunities as identified by SN professionals.

Positive outcomes of mentoring relationships have been well documented in literature. Research has shown that mentoring relationships can be highly supportive, encouraging, and fulfilling in meeting career and life goals, particularly with peer-mentoring relationships (Kram & Isabella, 1985; Ragins, Cotton, & Miller, 2000). Respondents in this study reported high selfefficacy and self-esteem as a result of participating in the Team Up mentoring program. Bachkirova, Arthur, and Reading (2015) evaluated the effectiveness of a coaching and mentoring program that the London Deanery ran for five years in London. Participants in the coaching and mentoring program had statistically higher self-efficacy after the program (post-coaching) than pre-coaching. Likewise, in a study assessing the role of mentoring on business success, Waters, McCabe, Kiellerup, and Kiellerup (2002) found that mentoring had a positive impact on protégés' self-esteem. The current study shows that participants in the Team Up mentoring program had a mean self-efficacy score of 8.08 (out of 10), and a mean self-esteem score of 3.39 (out of 4). These findings are similar to those of other studies, eliciting the thought that mentoring programs can result in positive influences upon self-efficacy and self-esteem.

The current study also found that self-efficacy and self-esteem were significantly correlated. This was an expected outcome based on previous research findings. The literature shows that self-efficacy and self-esteem are highly correlated (Afari, Ward, & Khine, 2010; Hinsz & Matz, 1997; Lane, Jones, & Stevens, 2002). Therefore, higher self-efficacy is related to higher self-esteem.

The degree of satisfaction with the mentoring program was also assessed in the current study. The results of this study showed that the participants in the Team Up mentoring program were satisfied with the outcomes of participating in such an initiative, with a mean score of 3.15 (out of 4) for participation evaluation (networking and meeting workshop goals and objectives) and a mean score of 3.41 (out of 4) for workshop comparison (more useful, organized, and relatable than other similar workshops). These findings support previous research on mentoring, such as the research of Kram and Isabella (1985) and of Ragins and colleagues (2000). Kram and Isabella (1985) proposed that peer relationships improve self-confidence and competence among individuals. Ragins and colleagues (2000) found that highly satisfied mentors and mentees reported more positive attitudes than dissatisfied mentors and mentees. One implication of these

results is that the decision to use peer-to-peer mentoring in the Team Up initiative set the stage for positive psychosocial outcomes for participants.

One-way ANOVAs were conducted to identify if there were mean differences in the scores on the study's five measurement scales (self-esteem, self-efficacy, program evaluation, participation evaluation, and workshop comparison) based on the categorical predictor variables of education, years of experience, job title, and region of participation in the workshop. The next set of paragraphs will address, specifically, self-esteem, self-efficacy, and participation evaluation.

#### Self-Esteem

Current research indicates that self-esteem is a predictor of success and well-being in leading life domains, such as relationships, work, and health (Hallsten, Rudman, & Sustavsson, 2012; Orth, Maes, & Schmitt, 2014). In this study, the researchers analyzed the relationship between self-esteem and education level, years of experience, job title, and region individuals attended the workshop. Within this research study, participants with an associate's degree had a significantly higher self-esteem than participants with a high school diploma or GED. These results indicate that education level could have an impact on self-esteem. In particular, those individuals with collegiate experiences may exhibit higher self-esteem than those with only high school experience. Additionally, self-esteem scores were significantly higher among SN directors than SN managers/supervisors. This outcome leads the researchers in this study to look beyond self-esteem, a derivative of self-concept, to the forces that drive self-esteem. Motivation, the desire that energizes goal-oriented behavior, could be the impetus for self-esteem among SN managers. Khorshidi, Mirzamani, and Esfahani (2011), noted that "motivation considerably contributes to perceptions, desires, drives, the environment interactions and performance of managers." Based on these assumptions, it might be appropriate to assume that managers participating in Team Up were less motivated than directors to fully embrace the Team Up process of peer-to-peer mentoring and information sharing.

### **Self-efficacy**

Bandura (1997) defines perceived self-efficacy as one's belief in one's ability to address challenges through an organized method to reach a desired outcome. Individuals with high self-efficacy view challenges as opportunities to grow and benefit from the experience; whereas, individuals with low self-efficacy may see challenges as opportunities to fail (Locke, McClear, & Knight, 1996). In the current research, individuals who have worked in the SN field for 16-20 years had a significantly higher mean score for self-efficacy than those who had 1-5 years of experience and longer than 20 years of experience. It is possible that these differences exist because of generational idiosyncrasies. Individuals who have worked in SN for longer than 20 years might be experiencing difficulty adapting to change, particularly if they are categorized as a baby boomer or traditionalist. Research on generational differences and work environment show that baby boomers and traditionalists are more likely to struggle with workplace change (Gibson, Greenwood, Murphy, & Riddle, 2009; Tolbize, 2008). Because the self-efficacy scale used in this study was a behavior-specific self-efficacy scale related to changes in meal pattern standards, new requirements for school food authorities, and skills acquired during the Team Up workshop (goal setting, action planning, and mentoring staff), it may be safe to assume that generational attributes may play a role in perceived self-efficacy among study participants. Likewise, the workers with 1-5 years of experience may be struggling with lack of experience or a dislike for rigid work requirements, based on the described workplace liabilities associated

with workers who are categorized, by age, as millennials or generation X (Gibson, et al., 2009; Tolbize, 2008).

There are other explanations for the differences identified for years of experience and self-efficacy. One consideration with the differences among years of experience, is that those who have worked in the SN field for 1-5 years could be attempting to get acclimated to the job requirements and responsibilities. Therefore, they have not developed a baseline of skills from which to feel confident. Consequently, the responses to the behavior-specific self-efficacy questions revealed a lack of confidence among those individuals, which in part can simply be a reflection of how they feel about the work associated with being SN directors. As for those who have been in the SN field for greater than 20 years, the lower self-efficacy could be associated with the sense of their own identity being challenged by the process of peer-to-peer mentoring, particularly if peer mentors were younger in chronological age or work experience. It also may be a reflection of challenging their knowledge base and identity by acquiring a new skill, and being asked to utilize that new skill, such as goal setting or action planning.

In this current study, SN directors had a significantly higher mean score on self-efficacy than SN assistant directors/area managers and SN managers/supervisors. In relation to the differences among SN directors and SN managers/supervisors, this outcome can be attributed to the idea that managers/supervisors are more rote and visual workers. Therefore, the skills used in the peer-to-peer mentoring process may not have met the learning needs of managers and supervisors. While the critical thinking necessary to work through the peer-to-peer mentoring were not advanced skills, the process may have may have resulted in a slightly lowered feeling of self-efficacy. It might also be important to consider a concept expressed by Wood and Bandura (1989), which indicates that regardless of title or position individuals must possess a

"resilient self-belief in one's capabilities" to assume control of a situation and to reach desired goals. In this study, the assistant directors, area managers, managers, and supervisors may have similar skill sets, but were unable to accomplish high self-efficacy through skills and networking within the Team Up workshop. Finally, it may be worth considering that the lower self-efficacy among assistant directors, area managers, managers, and supervisors could be attributed to the limited ability of individuals in this position to be the agent of change in the SN department.

## **Participation Evaluation**

Respondents to the current study were asked to assess the value of participation in the Team Up workshop in relation to specific expected outcomes, including networking with peers, establishing goals and action plans, and achieving established goals. The results of this study showed that SN directors and others (upper-level management, such as administrator, dietitian/menu planner, director of residential facility, and superintendent) had a significantly higher mean score for participation evaluation than SN assistant directors/area managers. These results could suggest that those with the authority to make decisions were more satisfied with the results of their participation in the study; whereas, those with limited autonomy to make decisions were less impressed with the outcomes of the study.

#### **Regional Differences**

Team Up utilized a research-based design for providing peer-to-peer mentoring, with a theoretical underpinning of the Social Cognitive Theory, Social Influence theory, and Carkhuff's theory of high-level functioning by means of the Skilled Helper model. For the regional Team Up workshop, the workshop developers strove to provide a structured, repeated delivery of the Team Up process, utilizing the same design and delivery method to all regional workshops. The results of this study indicate that there were no significant differences in self-efficacy,

self-esteem, program evaluation, participation evaluation, and workshop comparison between regions. Thus, the delivery method designed for the Team Up workshop was successfully implemented.

Researchers assessed if the Team Up methods for providing networking opportunities, best practices sharing, and peer-to-peer mentoring was effective in meeting the overall goals of the workshop. The analysis of this research revealed that over 85% of the respondents have expanded their network of SN professionals and have met a new SN professional whom they can contact regarding their local SN program. Therefore, the objective of allowing for networking opportunities among SN directors was accomplished.

Over 80% of the respondents in this study indicated that they were successful in implementing the action plans they created at the Team Up workshop, and nearly 80% of the respondents indicated that they developed SMART goals and actions plans to address other issues and challenges in their SN program. Along with that, over 80% of the respondents indicated that the Team Up workshop changed how they address challenges and issues that arise in their SN program. These results reverberate what has been noted in the literature regarding power of a good mentoring experience and peer relationships on mentor outcomes, as well as the impact of self-efficacy on goal setting and attainment (Bachkirova, et al., 2015; Kram & Isabella, 1985; Luszczynska, A., Scholz, U., & Schwarzer, R., 2005; Ragins, et al., 2000). That is, individuals who are satisfied with the mentoring experience will have more positive attitudes and are more self-efficacious. Furthermore, individuals with high self-efficacy have improved goal setting ability and more persistence in pursing goals set (Luszczynska et al., 2005). Luszczynska and colleagues (2005) examined the relationship between general self-efficacy and intentions, implementation intentions, outcome expectancies, and self-regulations. In that study, researchers

found that high self-efficacy was related to strong intentions to exercise, to continue training, and to implement training. These outcomes mirror the outcomes of the Team Up workshop, with a strong majority of the respondents indicating continued use of goal setting and action planning for new issues and challenges faced at the local SN program, as well as intentions to use skills gained at the Team Up workshop. In the work done by Bachkirova and colleagues (2015), it was identified that after doctors and dentists had participated in a coaching and mentoring program, they reported that they improved or significantly improved with confidence in making changes, problem solving, and working with colleagues. These areas were concepts of the Team Up workshop, and were identified in Team Up evaluation results. Taken together, these findings suggest that the delivery method of the Team Up workshop had a positive, significant effect on participant outcomes for goal setting, goal attainment, networking, problem solving, and implementation intentions.

### CONCLUSIONS AND RECOMMENDATIONS

The results of the present study show that the relationship between peer mentoring and self-efficacy and self-esteem are important to observe positive outcomes with goal setting and goal attainment among school nutrition (SN) administrators and leaders, particularly among SN directors. Besides the generational differences that might result in differences of the level of efficacy, SN directors and administrators were more positively influenced by participating in a regional *Team Up for School Nutrition Success* (Team Up) than negatively. This study supports the use of the Skilled Helper model to deliver peer-to-peer mentoring to SN directors and SN leaders, suggesting that the common beliefs about the impact of self-efficacy and self-esteem and other constructs on mentoring outcomes should be expected.

The present study has some limitations. The respondents to this study's survey were responding in retrospect to a program that had taken place at a minimum of 17 months prior to survey completion. Additionally, the questions regarding goal attainment and new goals being set relied on self-reported responses. The researchers have no way of knowing if the goals set at the Team Up workshops were actually accomplished by respondents. The researchers also have no proof of new goals set at any given SN program. While researchers did ask participants to assess the effectiveness of the Team Up mentoring program, we did not directly assess the program's quality.

Although there have been numerous studies conducted on mentoring, there were no studies identified that addressed mentoring SN professionals. Moreover, there were no studies on the impact of self-efficacy and self-esteem on job performance outcomes for SN professionals. The significance of the current research is three-fold. First, with the potential for changes in the Healthy, Hunger Free Kids Act every five years, methods to improve efficacy and to empower SN directors and administration will be pivotal to successful transitions to new regulations. Therefore, the Team Up model for peer mentoring has provided a new method to improve adherence to federal regulations for SN professionals. Secondly, the finding (in the current study) that peer mentoring has positive outcomes on self-efficacy, self-esteem, goal attainment, and new goal creation suggests a possible strategy for increasing self-efficacy and self-esteem among SN directors. These findings may also translate over to other SN staff. Finally, the participation in Team Up generated new problem management skills for SN professionals.

In the future, research should be conducted to continue to review the impact of peer mentoring on the job and job performance outcomes among SN professionals. Additionally, continued efforts to utilize the Team Up model for delivering peer-to-peer mentoring to SN professionals should be employed. Because of the positive outcomes from the current study, it is important to recognize the most effective ways to address the needs of SN professionals. Further research could provide a more in-depth evaluation of the quality and effectiveness of the Team Up workshop from the perspective of both the mentor and the mentee.

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