The Extension paraprofessional model: Relationship of program effectiveness with paraprofessional teaching style and personality profile

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Abstract

To create and maintain a high-quality paraprofessional program, administrators would benefit from knowing characteristics of successful paraprofessionals. This study examined the educational effectiveness of paraprofessionals and compared paraprofessional teaching style and personality type with their program effectiveness. Results indicate that there are associations among these variables and the level of positive behavioral change in participants. Participants working with paraprofessionals whose Myers-Briggs type indicator scores fell in the E (Extraversion), S (Sensing), T (Thinking), and J (Judging) ranges and participants working with paraprofessionals scoring in the teacher-centered range of the Principles of Adult Learning Scale were more likely to report higher levels of positive behavior change. Information from this study can guide and direct personnel and training decisions and enhance programs of organizations that utilize the paraprofessional model for education delivery.

Introduction

Numerous countries and disciplines within the Cooperative Extension System are under pressure to adopt more efficient, accountable, and less expensive means of educational programming. One approach utilized by many systems to achieve the objective of providing cost effective education is the expanded use of paraprofessionals in teaching roles. The paraprofessional model has persisted as an education and service model for at least two centuries and in many countries, serving both special population groups as well as the general public. Current legislation, combined with sociocultural concerns and changes, and an increasing set of empirical findings supporting the effects of the paraprofessional model, are likely to result in increasing demands for this model throughout the next century. This demand underscores a need for standards of practice in recruiting, hiring, training, and supervising paraprofessionals.

Wasik (1997) indicated that the most intense debate in arranging for home visiting services, like EFNEP, is whether to employ professionals or paraprofessionals. She also stated that one of the assumed advantages of hiring paraprofessionals, that of salary savings, may shrink when the necessary resources needed to support the paraprofessional are added (e.g., inservice training). In their publication, New Careers for the Poor, Pearl & Reissman (1965) state that, while some agencies document benefits and value of the paraprofessional, others encounter negative experiences with ineffective paraprofessionals which make program administrators question the efficacy of this approach. Therefore, the need to identify and select paraprofessionals that require less of these support resources is quite important.

The identification of characteristics of effective paraprofessionals has become one of the major dilemmas encountered when implementing the paraprofessional model. According to Iscan and Nelson (1977), there appeared to be considerable controversy as to what constitutes a successful paraprofessional and what type of individual should be recruited and selected in a paraprofessional role. Programs vary widely in their criteria for choosing paraprofessionals. Criteria for identifying and selecting effective paraprofessionals have tended to emerge out of a trial and error process (Larner & Halpern, 1987), and have included accessibility, available transportation, and being indigenous to the communities in which the paraprofessionals will work (Spindler, 1967; Brand, 1972; Randall, Brink & Joy, 1989). Other authors have looked at a variety of criteria that organizations consider in recruiting and selecting paraprofessionals. The EFNEP trend has been to hire individuals who are indigenous to the target audience with whom they work. Inservice training has been emphasized as a way to provide...
these paraprofessionals the EFNEP subject matter information that they use in their work.

Yerka’s (1974) research and the later research of Cadwaller (1985) and Cadwaller and Olson (1986), as well as the commentary of Giblin (1989), however, questioned whether the paraprofessional’s subject matter knowledge is the most important characteristic in determining program outcomes with clients. Yerka (1974) found that job persistence, experience, attitude toward work, age, and knowledge of teaching-learning strategies also contributed greatly in explaining variance in program knowledge outcomes. Santopolo and Kell (1976) identified positive attitude, enthusiasm, persuasiveness, self-confidence, commitment, concern and initiative as critical job requirements for paraprofessionals. Iscan and Nelson (1977) identified several personal characteristics of EFNEP aides, now commonly known as program assistants, and specifically the ability to relate with people, attitude toward others and the ability to express, as the highest ranked characteristics important for an EFNEP aide’s success. Cormier, Cormier, & Weisser (1984) identified the ability of either a professional or a paraprofessional home visitor to convey warmth and caring, to be empathetic, and to be able to put clients at ease as skills essential to establishing working relationships with clients. Wasik (1993) suggests that personal maturity, good judgment, and interpersonal skills are key considerations in the selection of successful professional and paraprofessional home visitors. However, in 1997, Wasik noted that many assumptions about the characteristics needed by successful paraprofessionals are not based upon empirical studies.

Given the importance of these non-subject matter knowledge characteristics to a paraprofessional’s program success, being able to identify individuals that possess these characteristics would help an organization such as EFNEP to hire individuals that would require less support resources from the organization while still being successful. Identifying which personal characteristics of EFNEP program assistants, or potential program assistants, are most closely associated with program success would be valuable information for Extension organizations in making personnel and staff development decisions and, ultimately, making the paraprofessional model operate effectively and efficiently.

**Purpose and Objectives**

Extension program administrators can benefit from knowing the characteristics of effective paraprofessionals so they can make informed decisions. Two categories of an individual’s personal characteristics that are related to interaction with others in a teacher-student relationship are the individual’s personal teaching style and personality type. Is a particular teaching style more effective? Is a certain personality type more effective? The answers to these questions would be useful in the recruitment and selection process as well as in the development of relevant pre-service and inservice training programs for paraprofessionals.

This study examined the effectiveness of paraprofessionals in working in a state EFNEP program in relation to the teaching style and personality type of each paraprofessional. The study was designed to 1) identify the educational effectiveness of EFNEP paraprofessional programs, and 2) compare individual EFNEP paraprofessional teaching styles and personality profiles with program effectiveness.

**Methods**

**Procedures**

The population for this study consisted of the forty-one Extension Expanded Food and Nutrition Education Program (EFNEP) paraprofessionals in South Carolina. Administered by the Cooperative State Research Education and Extension Service of the U.S. Department of Agriculture in cooperation with State Cooperative Extension Services, EFNEP has employed paraprofessionals to provide nutrition education to limited resource audiences in the 55 states and territories of the United States of America since 1969. The EFNEP paraprofessionals in this study were 100% female, 88% African American, 12% Caucasian, and 100% with a high school diploma or G.E.D. A profile of the audience reached by the EFNEP paraprofessionals in South Carolina in 1997 revealed that the 1105 graduated EFNEP participants were 63% rural, 53% with incomes of less than 50% of poverty level, 56% receiving Food Stamps, 74% with a high school diploma or G.E.D, 26% with less than a 12th grade education, 32% Caucasian, 66% African-American, 1% Asian, and 1% Hispanic.

**Instrumentation**

The study examined paraprofessional effectiveness and compared paraprofessionals’ teaching styles and
personality characteristics with program effectiveness. Data from the 1997 Adult Enrollment form, a component of the national EFNEP record keeping system, were utilized to measure program effectiveness. The Adult Enrollment form provides demographic and behavioral change data of participants as it relates to resource management, food safety and nutrition behaviors. These included: 1) planning meals in advance, 2) comparing prices, 3) running out of food before the end of the month, 4) not allowing meat or dairy foods to sit out for more than two hours, 5) not thawing foods at room temperature, 6) thinking of healthy food choices when deciding what to feed their families, 7) preparing foods without adding salt, 8) reading labels to select food with less sodium, and 9) reading labels to select food with less fat. Program effectiveness was defined in this study as statistically significant positive behavioral change in these nine areas as reported by program participants on the Adult Enrollment form.

The Principles of Adult Learning Scale (PALS) designed by Conti (1982) was used to assess paraprofessional teaching styles. This 44 item instrument is a summative rating scale using a modified Likert-type scale to identify an individual’s preferred teaching style, either teacher-centered or learner-centered. PALS has been tested by Conti for construct validity, criterion-related validity, and content validity (Conti, 1985b). He also has tested the PALS for reliability and internal consistency within the field of adult education (Conti, 1985b). Possible scores on the PALS range from zero to 220. The normed mean for the PALS is 146. High scores on the instrument are associated with learner-centered teaching behaviors. Lower PALS scores are associated with teacher-centered behaviors. A learner-centered teaching approach is described by Conti as being a collaborative process that assumes that adult learners are problem-centered and learn better when they deal with problems directly concerning them and the learning has immediate application to solving those problems. In the learner-centered mode, the teacher functions as a facilitator who supports the learner’s self-directed learning efforts. The teacher-centered approach is an authoritarian approach to learning in which the authority for what is to be learned and how it will be taught resides with the instructor (Conti, 1985a).

In a study of the relationship between teaching style and adult student learning in an adult basic education program, Conti (1985b) found that for short-term learning goals directed toward a specific goal (in this case, the GED), a teacher-centered approach appeared to be the more effective approach. However, for the development of skills that require a long-term process of learning that involves student self-concept, the more learner-centered approach appeared to be more effective. Each EFNEP paraprofessional’s score on the PALS was placed into one of three ordinal categories of low, medium or high for analysis purposes.

The Myers-Briggs Type Indicator (MBTI) was used to assess personality characteristics of paraprofessionals. The MBTI is culturally sensitive, based on Jung’s theory of psychological types, and reports preferences on four sub-scales. The four scales are Extraversion-Introversion Scale (EI), Sensing-Intuition Scale (SN), Thinking-Feeling Scale (TF), and Judgment-Perception Scale (JP). The EI scale describes whether an individual likes to focus his/her attention on the outer or inner world. The SN scale describes how an individual perceives or acquires information; does he/she use his/her senses or rely on intuition? The TF scale describes how the individual makes decisions or judgments about something either through thinking or feeling. The JP scale describes how an individual orients himself or herself to the outer world by taking primarily a judging attitude or a perceptive attitude (Myers, 1962). Paraprofessional’s results from each sub-scale of the MBTI were analyzed as a two-level nominal variable for analysis.

**Statistical analysis**

Data collected in the project were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 7.5 for Windows (SPSS, 1997). Descriptive statistics were used to identify levels of impact of EFNEP programming. Crosstabulations, with appropriate measures of levels of associations, were used to determine levels of association between variables. Levels of statistical significance were determined at the .05 level.

**Results**

Results from this study indicate the paraprofessional approach has a positive impact on behavioral changes among participants related to nutrition choices, food safety practices, and food-related economic practices. For the nine expected behavior practices, the following percentages of participants reported some level of positive change during the 1997 program year: planning meals in advance (58%), comparing prices when shopping (44%), running out of food before the end of the month (36%), not allowing meat...
or dairy foods to sit out for more than two hours (47%), not thawing foods at room temperature (62%), thinking of healthy food choices when deciding what to feed their families (50%), preparing foods without added salt (47%), reading labels to select foods with less sodium (57%), and reading labels to select food with less fat (59%).

Looking at the effectiveness of EFNEP based on the paraprofessional’s teaching style and personality traits, the results indicate that there are associations among these variables and the level of change in participants.

**Teaching Style**

The mean score for the 37 EFNEP paraprofessionals who completed the PALS was 89.7. This indicates that the paraprofessionals as a group are much more teacher-centered than the norm as found by Conti (1985a).

Examination of the paraprofessionals’ PALS teaching style scores and the reported level of behavior changes by participants indicated statistically significant levels of association for six out of the nine behaviors. The three behaviors for which no statistically significant associations were found were: comparing prices when shopping, running out of food before the end of the month, and not thawing foods at room temperature. For each of the six behaviors that had a significant level of association with the PALS score, participants reporting greater degrees of positive change in food-related behaviors were working with paraprofessionals whose PALS scores were more teacher-centered, as opposed to the paraprofessionals whose scores were more toward the learner-centered end of the scale.

**Personality Traits**

Personality traits, as measured by the Myers-Briggs Type Indicator (MBTI) scale, also indicated several statistically significant associations with the levels of behavioral change reported by EFNEP participants. For the extraversion/introversion (E/I) preference area of MBTI, seven out of the nine reported behavioral changes produced a statistically significant measure of association between level of behavioral change and level of preference. The two behaviors that did not produce significant associations were: comparing prices when shopping, and running out of food before the end of the month. For the seven behaviors that were associated with the E/I area, the analysis indicates that participants working with a paraprofessional in the extraversion (E) range of the MBTI are more likely to report higher levels of positive behavioral change than those working with a paraprofessional in the introversion (I) range.

In the sensing/intuition (S/N) MBTI preference area, seven out of the nine behavioral items were associated with the personality trait level of the paraprofessional. The two behaviors that did not produce significant associations were: running out of food before the end of the month, and thinking of healthy food choices when deciding what to feed their families. For those behaviors that were associated with the S/N preference area, participants who worked with paraprofessionals scoring in the MBTI sensing (S) range were more likely to report higher levels of positive behavioral change than those working with a paraprofessional in the intuition (N) range.

The thinking/feeling (T/F) MBTI preference level was also associated with the level of reported positive behavioral change of participants in the same seven behavioral items as that found in the Extraversion/Introversion (E/I) range. The two behaviors that did not produce significant associations were, again: comparing prices when shopping, and running out of food before the end of the month. EFNEP participants who worked with paraprofessionals scoring in the MBTI thinking (T) preference range were more likely to report higher levels of positive behavioral change than those individuals working with paraprofessionals in the Feeling (F) range.

In the judging attitude/perception attitude (J/P) MBTI level was associated with reported behavioral change in all nine of the reported behavioral change items. The analysis showed that those participants working with paraprofessionals whose MBTI scores fell in the judging (J) range were more likely to report higher levels of positive behavioral change than those participants working with a paraprofessional whose score was in the Perception (P) range.

**Discussion**

One of the findings of this study is that a relationship exists between the teaching style used in the education setting by the EFNEP paraprofessionals in this study and the level of participant behavior change. Although the adult education literature (Freire, 1970; Kidd, 1976; Knowles, 1970) suggests that the collaborative, learner-centered method of teaching is generally the most effective, this study
indicates that teacher-centered approach more effectively elicits educational program impact. These results also appear to support Conti’s findings in his study of an adult basic education program (Conti, 1985b). In that study, those individuals studying for the GED were more successful when taught by a more teacher-centered instructor. Perhaps the EFNEP curriculum objectives (i.e. specific behavioral changes) are somewhat like the goal of getting the GED in that they are very focused on specific, short-term goals. Another possible explanation is that EFNEP program participants are, generally, unfamiliar with adult learning situations and may require a more structured, organized learning environment in order to understand new concepts and develop skills necessary to change behavior.

This study also indicates that paraprofessionals whose MBTI personality traits fell in the ESTJ range more effectively achieved positive behavior change among their program participants. The individual with these personality traits tends to focus on the outer world of people and the external environment. This type of individual prefers to communicate by talking rather than writing, and needs to experience the world in order to understand it and thus tends to like variety and action. This “people-focus” corresponds with the literature which suggests that interpersonal skills are critical for successful paraprofessionals.

The paraprofessional with the sensing and thinking combination of preferences would tend to focus attention on realities and tends to handle this with objective analysis, thus becoming practical and analytical. The individual with this personality preference combination appears to be more successful. This conflicts with the literature which suggests that a successful paraprofessional should convey warmth, be empathetic, friendly, enthusiastic and understanding, traits which describe the feeling and intuition preferences of the MBTI. Sociocultural characteristics of the paraprofessionals and the clients in this study, primarily Southern African American, may explain in part the preference for this personality type.

**Recommendations**

Based on the results of this study, the following recommendations are proposed:

1. Studies need to be conducted beyond the scope of this study to provide additional information as to relationships between paraprofessional characteristics and program effectiveness. The results of this study support several earlier findings in the literature regarding teacher characteristics and educational program effectiveness, and conflict with other findings. Additional studies involving paraprofessionals with other sociocultural backgrounds, in other disciplines within Extension or other non-formal education organizations, and from other countries would contribute to the understanding of these relationships and their potential use. Such studies might identify other paraprofessional characteristics which can be used as indicators of an individual’s potential effectiveness.

2. Administrators of educational programs utilizing paraprofessionals to deliver educational programs directly to clientele should explore the use of measures of personality type and preferred teaching style in the paraprofessional recruitment, selection, orientation, and inservice training processes.

Hiring, training, and ongoing staff support decisions are critical for the provision of quality paraprofessional-delivered programs. Programs that cannot hire and retain quality staff will not be effective. Ineffective paraprofessional staff or high levels of staff turnover results in the inefficient use of valuable organizational resources. Program administrators could benefit from knowing the characteristics of effective paraprofessionals so they can make informed personnel and staff development decisions.

Preferred teaching styles and personality preferences can be identified for current and potential paraprofessional employees using tools such as the Principles of Adult Learning Scale and the Myers-Briggs Type Indicator. This knowledge can help to identify positive aspects of potential employees in the selection process. Knowing this information about current paraprofessional employees can also provide insight to organizations as to what inservice training might be provided to help employees understand the concepts of teaching style and personality trait types and use this information to plan and conduct more effective educational programs.

**References**


