



Competencies and Values of Barangay Nutrition Scholars in Eastern Visayas: Basis for Program Development

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Abstract: *The study determined the competencies and values of Barangay Nutrition Scholars (BNS) in Eastern Visayas and the relationship between the said variables along the socio demographic variables, which formed as bases in proposing for a capacity training development program for BNS in the local community. The study utilized the quantitative research design in determining the values and competencies of the BNS. Descriptive and inferential statistics were employed to measure and analyze the variables. It was affirmed that there were significant differences in mean ratings for competence in implementing, monitoring and evaluating, and documenting and record keeping, while there are no significant differences in mean ratings for competence in planning, coordinating, and mobilizing resource. In terms of the core values practiced, it was affirmed that the BNS “practiced” the values of integrity, transparency, excellence in work, respect for human rights, and accountability while they only “moderately practiced” values of efficiency and equity on the other hand, MNAOs indicates that the BNSs “practiced” values of integrity, transparency, respect for human rights, and accountability BNSs only “moderately practiced” values of efficiency, equity, and excellence in work. Further, there is significant difference between the BNS and MNAO mean ratings. As a recommendation, it was put forward that the selection criteria for BNS be reviewed and consider factors that could improve nutrition program management including gender mainstreaming criteria. It is imperative to formulate a simplified version and an extensive practical approach to nutrition education training needs to be looked into when designing and modifying the existing programs.*

Keywords: *Nutrition, Competencies, Values, Program Development, Eastern Visayas, Philippines*

1. INTRODUCTION

The American Public Health Association (APHA) defines Community Health Worker as “frontline public health workers who are trusted members of and/or have an unusually close understanding of the community being served” (ALPHA, 2017 para 2). Through outreach,



education, and support, they attempt to impact the social determinants of health and connect communities to health and social service delivery systems (US Centers for Disease Control and Prevention, 2013).

Barangay Nutrition Scholars play an important role in the successful implementation of the Philippine Plan of Action for Nutrition (PPAN) 2017-2021, an integral part of the Philippine Development Plan (PDP), on which it is a Medium-Term Plan of development to address poverty. These workers are those that focus on the promotion of good health through good nutrition and primary prevention of nutrition related illness in the population (PHN, 2017). Appropriate skills especially training for health workers presents a potential entry point in improving the nutrition situation among children and the community (Sunguya et al, 2013).

Although BNS and Barangay Health Worker (BHW) are both Community Health Workers, the BHW is a person who has undergone training programs under any accredited government and non-government organization and who voluntarily renders primary health care services in the community after having been accredited to function as such by the local health board in accordance with the guidelines promulgated by the DOH as prescribed by Republic Act 7883.

The task of the BNS as stipulated in the law is very crucial granting that a human resource based is to develop. The result of barangay nutrition worker's action could directly contribute to shaping the overall health, and socioeconomic landscape of the country as this manifestation is carried through adulthood (Save the Children, 2016). Being a BNS is a challenging job because the future of the children is in their hands (Gavilan, 2014).

In the Philippines, there is a quantifiable number of well-trained and qualified professionals working to deliver social services especially for children's health and nutrition (UNICEF, 2018). In Eastern Visayas, according to NNC Regional Office, there are 4,849 BNSs in 2019. However, the number of trained BNSs varies as in the new Barangay Chairperson take hold of the position every after election, another set of barangay health workers are identified including the selection of the BNS. At the barangay level, the BNC provides administrative supervision to the BNS. Administratively, the BNS are under the LGU and is supervised by the City/Municipal Nutrition Action Officer at the municipal or city level and technically supervised by the District/City Nutrition Program Coordinator. The different municipalities within the province directly communicate with the Provincial Nutrition Action Officer (PNAO). The notable shortage of trained manpower provides limited supply of basic services which hinders full development to fulfil children's rights.

Thus, this study was proposed because of several rationalizations. Foremost is the need to provide empirical monitoring of the current status of BNS in Eastern Visayas since they are an important aspect in the delivery of basic health and nutrition services to the general public. The study is also rationalized by the legal mandates of the state, as reflected in the aforesaid national decrees, to uphold the health and socioeconomic conditions of the Filipino people through the implementation of an efficient nutrition program. Furthermore, the need to investigate the implementation of a national program in the local setting, as noted in the aforementioned discussion, is imperative. Albeit there have been local studies that investigated BNS competencies, it is noted that there is a dearth of documented studies in Eastern Visayas that focused on the competencies and values of BNS and the relationship of these variables with each other and with certain demographic factors.



Statement of the Problem

The study aimed to determine the competencies and values of Barangay Nutrition Scholar (BNS). Specifically, the study answered the following questions:

1. What is the profile of the Barangay Nutrition Scholar in terms of
 - 1.1.Age;
 - 1.2.Gender;
 - 1.3.Civil Status;
 - 1.4.Educational Attainment;
 - 1.5.Length of Service as BNS;
 - 1.6.Number of Trainings/Seminars attended related to BNS;
 - 1.7.and number of awards received as BNS?
2. What is the competency level of Barangay Nutrition Scholars as rated by the Nutrition Action Officer and the Barangay Nutrition Scholars themselves in terms of the following?
 - 2.1.Planning
 - 2.2.Coordinating
 - 2.3.Implementation
 - 2.4.Monitoring and evaluation
 - 2.5.Resource mobilization
 - 2.6.Documentation and record keeping
3. Is there a difference in the Barangay Nutrition Scholars level of competencies across raters?
4. What is the extent by which the following values are practiced by the Barangay Nutrition Scholar as assessed by the Nutrition Action Officer and the Barangay Nutrition Scholars themselves, along the following:
 - 4.1.Integrity
 - 4.2.Transparency
 - 4.3.Efficiency
 - 4.4.Equity
 - 4.5.Excellence in work
 - 4.6.Respect for human rights
 - 4.7.Accountability
5. Is there a relationship between the level of the Barangay Nutrition Scholars competencies and their:
 - 5.1.Profile variables;
 - 5.2.Values employed in the workplace?
6. Which of the identified variables best predict the competencies of the Barangay Nutrition Scholars?
7. What development program maybe proposed based on the findings of the study?

2. METHODOLOGY

Research Design

The study utilized the descriptive-correlational research design to determine the level of competence and practice of core values in the workplace among Barangay Nutrition



Scholars, as well as the relationship between selected profile variables and these variables. According to Sousa et al (2007), descriptive-correlational design is applicable when the focus of the study is to “describe the variables and the relationships that occur naturally between and among them.” Thus, this design was deemed appropriate to address the objectives of this study.

Research Locale

The study was conducted in the purposively selected provinces of Eastern Visayas. The selection was based on the 2018 Ranking of the Provinces on the Prevalence of Malnutrition in the region. This was then stratified as low, middle and high occurrences or prevalence and magnitude of malnutrition in the respective provinces.

Research Respondents

The respondents of the study were 155 selected BNSs working with the MNAO in the three (3) provinces of the region, namely: Samar, Leyte and Southern Leyte or the research locale. The identified respondents were also then rated by their respective supervisors, the MNAOs. There are 4,449 BNSs in the region in 2017 where 642 in Samar, 1,756 BNSs in Leyte and 508 BNSs in Southern Leyte. The BNS are distributed and appointed by their respective LGUs by means and ways: a typical assignment was one BNS for each designated per barangay as stated in PD 1569. Thus, a one-is-to-one ratio was ideal in any given LGU-setup. The G-Power software was used to conduct a priori power analysis to estimate the sufficient sample size for the study. With an anticipated effect size of 0.15 for 8 independent/predictor variables, the estimated minimum sample size to achieve a statistical power level of 0.80 was 116. To provide a better picture of the study, the sample size was increased to 155.

Another round of the same sampling methodology was employed per province of choice to fully operate the study randomly sampling the necessary representation. To calculate the number of samples, the specialized G power analysis specified to input hypothesis test was and the different predictor variables. In the determination of the significant predictors of level of competence and practice of core values, the multiple regression analyses were performed. The predictor variables were: age, sex, civil status, education, length of service, number of trainings and number of awards. The total breakdown of the population and sample size of the research respondents of 155 were distributed as 39 samples in Samar, 80 samples for Leyte and 36 samples in Southern Leyte.

Research Instrument

The research instruments consisted of three parts. Part 1 focuses on the profile of the respondents which include the respondents' code, age, sex, civil status, other job, educational attainment, length of service as BNS and trainings seminars attended. This part was researcher-made section and there was no validation needed since this was basic demographic information related to the BNS. Retrieval of this instrument from the respondents was done together with the other sections of the questionnaire.

Part II covered questions on the BNS competencies. This part was divided into items for planning, coordination, implementation, monitoring and evaluation, resource generation/mobilization and documentation and record keeping. A total of 51 items were rated for the BNS



competence. Administration and retrieval of this instrument was done in a single day in order to avoid loss of data. This was facilitated with the assistance of the local government units.

Part III measured the practice of the BNS as to: integrity, transparency, efficiency, equity, excellence in work, respect for human rights and accountability. A total of 35 items are measured under the Part II questionnaire on values. Furthermore, these values were part of the formation of the BNS through the InTEERAct, which is the values restoration and good moral and right conduct formation program of the National Nutrition Council and Civil Service Commission (CSC). Since this is part of the major research instrument, retrieval process for this section was done applying the same strategies.

Data Gathering Procedure

The researcher followed the protocol and procedures set by the Graduate School in undergoing this research. Foremost, a letter to the university addressed to the Graduate School Dean was sent with the proposed research title and proposal as attached. After seeking for the administrative approval and clearances, the researcher had a courtesy call to the LCE or their Administrative Officer or to the Municipal Health Officer. The researcher was the one who administered the survey questionnaire of the respondents. A separate consent for the respondents was prepared and was given to ensure the anonymity and confidentiality of the respondents. Before the BNS answered the survey questionnaire, the researcher explained the objectives of the research as for the respondents to have a clearer view of what the study aims to achieve. The same concept was done to the MNAO as the supervisor respondent who evaluated the BNS with the same statement of questions. This process was done routinely by the researcher throughout the various research locale and respondents that he visited during the data-gathering.

3. RESULT & DISCUSSIONS

Profile of the BNS. From the 155 respondent BNSs, 153 were females while 2 are males which provided that most of the BNS employed are female. The female group posit with ages range from 21 to 74 and with a mean of 44 years old. Most BNSs are married followed by single status and a few of separated and widower. In terms of educational attainment, most BNSs are high school graduates, followed then by college level and some graduated from college. Most of them serve the community for more than 10 years focusing on health and nutrition services. Moreover, 80% of the BNSs are trained and had been into formal training and seminar pertaining to scope of work. However, few of them received awards for their exemplary performance or recognition of their work.

Competencies of the BNS.

The BNSs perceived themselves as “moderately competent” in planning and in mobilizing resource, with mean ratings of 3.34 and 2.67, respectively. They perceived themselves as “competent” in coordinating, documenting and record keeping, implementing, and monitoring and evaluating, with mean ratings ranging from 3.45 to 3.77. Meanwhile, the MNAOs rated the BNSs as “moderately competent” in mobilizing resource, planning, documenting and record keeping, and coordinating, with mean ratings ranging from 2.85 to



3.36, and “competent” in implementing and in monitoring and evaluating, with mean ratings of 3.45 and 3.59, respectively.

Core Values of the BNS. Majority of the BNS respondents highly practice integrity as a core value, which is indicated by 42.6%. Majority of the MNAO respondents practice integrity as a core value, which is indicated by 49.0%. A large percentage of the BNS and MNAO respondents practice transparency as a core value, which is indicated by 45.2% and 52.9%, respectively. It was affirmed that majority of the BNS moderately practice efficiency as a core value, which is indicated by 32.9%, while majority of the MNAO obtained the rating of 40%. Majority of the BNS and MNAO respondents practice equity as a core value, which is indicated by 32.9% and 45.8%, respectively. It is evident from the results that majority of the BNS and MNAO respondents practice excellence in work as a core value, which is indicated by 32.9% and 43.2%, respectively. The results reflect that majority of the BNS and MNAO respondents practice respect for human rights as a core value, which is indicated by 38.7% and 52.3%, respectively. A large percentage of the BNS and MNAO respondents practice accountability in work as a core value, which is indicated by 38.7% and 43.2%, respectively.

Self-assessments of the BNS indicate that they “practiced” values of integrity, transparency, excellence in work, respect for human rights, and accountability, with mean ratings ranging from a high of 4.04 to a low of 3.53. However, they only “moderately practiced” values of efficiency and equity, with mean ratings of 3.24 and 3.40, respectively. Assessments of the MNAOs reveal a very similar result, indicating that the BNSs “practiced” values of integrity, transparency, respect for human rights, and accountability, with mean ratings ranging from a high of 4.02 to a low of 3.59. MNAO assessments further indicate that BNSs only “moderately practiced” values of efficiency, equity, and excellence in work, having mean ratings of 3.20, 3.38 and 3.40, respectively.

Comparison of Respondents’ Ratings. The null hypothesis was rejected in terms of the similarities of the respondents’ competence in the areas of implementing, monitoring and evaluating, and documenting and record keeping. There exist significant differences in mean ratings for competence in implementing, monitoring and evaluating, and documenting and record keeping, with p-values of 0.016, 0.009 and 0.029, respectively, which are far below the level of significance of 0.05. Mean ratings from MNAOs across the indicated three variables or dimensions are significantly lower than the mean self-ratings of the BNSs.

However, null hypothesis was accepted in terms of the similarities of the respondents’ competence in the areas planning, coordinating, and mobilizing resource.

Relationship of Variables. The null hypothesis is rejected in favour of the research hypothesis. Hence, there are significant positive relationships between age of the BNSs and their level of competence ($r = 0.175$, $p = 0.030$) and practice of core values in the workplace ($r = 0.167$, $p = 0.038$). There exists also a significant positive relationship between educational attainment and level of competence of the BNSs ($r_s = 0.215$, $p = 0.007$). Length of service is also significantly and positively correlated with level of competence ($r = 0.262$, $p = 0.001$) and practice of core values in the workplace ($r = 0.229$, $p = 0.004$), with the association of length of service with competence being much stronger than its association with practice of core values. Number of trainings or seminars attended is likewise significantly and positively correlated with level of competence ($r = 0.265$, $p = 0.001$) and practice of core values ($r = 0.261$, $p = 0.001$). On the other hand, the variables sex, civil status, number of awards received, and prevalence of malnutrition are not significantly associated with level of competence and



practice of core values; likewise, educational attainment is not significantly associated with level of practice of core values, as evidenced by corresponding p-values exceeding the level of significance of 0.05.

It was affirmed that when level of competence and practice of core values as rated by the MNAOs were paired with the profile variables, only four statistically substantial associations were found, including those between: age and competence level ($r = 0.169$, $p = 0.035$), length of service and competence level ($r = 0.303$, $p < 0.001$), length of service and practice of core values ($r = 0.253$, $p = 0.001$), and number of trainings attended and practice of core values ($r = 0.201$, $p = 0.012$). In addition, there is a significant negative relationship between prevalence rate of malnutrition and level of competence ($r_s = -0.185$, $p = 0.021$).

Predictors of BNS Competencies. Educational attainment is a significant predictor of competence ($B = 0.401$, $p = 0.010$), but not of practice of core values in the workplace ($B = 0.227$, $p = 0.112$). It can be noted that when all other predictor variables are held constant, the competence level of BNSs who are at least high school graduates is higher by a magnitude of 0.401 than those whose educational attainment is at most high school level. The number of trainings or seminars attended by the BNSs significantly predicts both competence ($B = 0.067$, $p = 0.022$) and practice of core values ($B = 0.064$, $p = 0.018$). Standardized coefficients indicate that educational attainment ($\beta = 0.210$) has a stronger effect than training ($\beta = 0.187$) on level of competence. Training has stronger effect on level of practice of core values ($\beta = 0.198$) than on level of competence ($\beta = 0.187$). On the other hand, as indicated by p-values exceeding 0.05 level of significance, the variables age, sex, civil status, length of service, and number of awards received are not significant predictors of competence and practice of core values.

Only length of service was found to be a significant predictor of either criterion variable when MNAO ratings were used as baseline data. That is, length of service affects competence ($B = 0.150$, $p = 0.008$) and practice of core values ($B = 0.107$, $p = 0.026$). When all other variables are fixed, level of competence and practice of core values increase by magnitudes of 0.150 and 0.107, respectively, for an increase of one year in length of service among BNSs. Meanwhile, the relative effect of length of service on competence ($\beta = 0.287$) is stronger than its relative effect on practice of core values ($\beta = 0.241$).

4. CONCLUSION

It was affirmed that there were significant differences in mean ratings for competence in implementing, monitoring and evaluating, and documenting and record keeping, while there are no significant differences in mean ratings for competence in planning, coordinating, and mobilizing resource.

In terms of the core values practiced, it was affirmed that the BNS “practiced” the values of integrity, transparency, excellence in work, respect for human rights, and accountability while they only “moderately practiced” values of efficiency and equity on the other hand, MNAOs indicates that the BNSs “practiced” values of integrity, transparency, respect for human rights, and accountability BNSs only “moderately practiced” values of efficiency, equity, and excellence in work. Further, there is significant difference between the BNS and MNAO mean ratings. It is important to note there was a significant positive relationship between age, educational attainment, length of service, and the number trainings



attended of the BNSs with their level of competence and practice of core values in the workplace.

Meanwhile, results of regression analysis show that educational attainment is a significant predictor of competence. The number of trainings or seminars attended by the BNSs significantly predicts both competence and practice of core values. Standardized coefficients indicate that educational attainment has a stronger effect than training on level of competence. Training has stronger effect on level of practice of core values than on level of competence.

Recommendations

It could be advanced that the selection criteria for BNS be reviewed and consider factors that could improve nutrition management program including gender mainstreaming criteria. It is imperative to formulate a simplified version and an extensive practical approach to nutrition education training needs to be looked into when designing and modifying the existing programs. There is a need to study the gaps of BNS program implementation and recommend security of tenure for BNSs. As important recommendation is to review and amend PD 1569, include the conduct an exhaustive consultation with all the BNS in the country to come-up with a better version of the policy that will reflect the needs and aspirations of the BNS. Recognition and reward scheme must be enhanced in order to motivate BNS to excel more in their function.

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