

RESEARCH ARTICLE

A demographic-based challenges and trust issues on the implementation of the new BSND curriculum

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ABSTRACT

Ensuring that the curriculum is aligned with the latest standards, guidelines, and best practices in nursing education and healthcare can be challenging. Developing fair and effective assessment methods to evaluate students' competency can be difficult. It is essential to ensure that assessments and pedagogical approaches accurately reflect the knowledge and skills students need as future registered nutritionists and dietician. The purpose of this study was to assess the challenges experienced by faculty and program administrators in relation to the mandates stipulated in the Commission on Higher Education (CHED) Memo Order No. 14, series of 2017. Faculty (n=37) and program administrators (n=5) were randomly selected from five higher education institutions in Mindanao, Philippines. Findings indicated that the administrators and teaching staff manifested low level of trust issues on the implementation of the curriculum. Consequently, they feel positive about the design, execution, and outcomes of the program. However, it is important to note several challenges they experienced. Lack of doctorate programs in institutions, absence of vertically articulated doctorate programs, and outdated library materials were the most prominent challenges the faculty and program administrators experienced. They also noted challenges related to excessive workloads for faculty beyond their Individual Daily Plans, the absence of Registered Nutrition and Dietetics (RND) professionals in food service establishments to supervise practicum experiences, and a lack of Memorandum of Agreement (MOA) with accredited Level III hospitals for practicum training programs.

Keywords: curriculum implementation; higher education; nutrition and dietetics; professional development; resource management

1. Introduction

There is a growing demand for Nutritionist-Dietitians as professionals who ensure that people consume food for its health benefits, not because it looks or tastes good. Because of this, the development of the curriculum, as well as its enhancement, successful implementation, and appropriate evaluation and monitoring, are the key focuses of education in the fields of nutrition and dietetics.

The goal of this study was to assess the challenges experienced in the implementation of the new Bachelor of Science in Nutrition and Dietetics (BSND) curriculum based on the mandates in the CHED

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Memo Order No. 14, series of 2017. This study shed light on the different concerns that the faculty and program administrators experienced. Such analysis would improve the instruction, resource management, trainings, and professional development strategies in higher education.

Uplifting adequate and appropriate nutrition is one of the primary responsibilities of nutritionists and dietitians in the process of nation-building and human development^[1]. The presence and involvement of a nutritionist and/or dietitian within the health care team is necessary, as they play a pivotal role in influencing the provision of medical nutrition care for both individuals and groups, with the goal of promoting and maintaining optimal health^[2,3]. Research in this field prioritizes nutritional advice and guidelines for the purpose of preventing and treating various diseases, with a particular focus on chronic ailments such as cancer, diabetes, cardiovascular disease, and obesity^[4-7].

Nutritionists and dietitians play a crucial role as the primary point of contact for the public when it comes to the field of nutritional genomics. Their expertise in this area positions them as ideal candidates to offer guidance on matters related to nutrition and genetics^[8,9]. It is worth noting that the existing nutrition and dietetics curricula lack the incorporation of advanced human genetics issues^[9]. These topics encompass talks on omics technology, the interpretation of genetic variation information, and the legal, ethical, and societal implications associated with genetic information^[8].

The relevance of training and education for nutritionists and dietitians stems from the ongoing advancements in the field of nutritional genomics, the absence of established guidelines for clinical practice and genetic nutritional guidance, and the escalating expectations placed on dietitians and nutritionists considering the expanding demand for genetic testing^[10,11]. In the Philippines, individuals pursuing a career as Nutritionist-Dietitians acquire their professional qualifications through the completion of a Bachelor of Science degree in Nutrition and Dietetics^[12]. The Bachelor of Science in Nutrition and Dietetics (BSND) is an undergraduate program spanning four years. Its primary objective is to impart knowledge and skills to students regarding the principles and procedures involved in utilizing food as a therapeutic tool for managing individuals afflicted with specific diseases. It is essential to determine and assess the nutrition and dietetics healthcare systems operational competencies required by health professional workforce^[11]. The ever-evolving methods of education and training call for the adoption of a national strategy that integrates nutrition throughout the many subject areas of the curriculum and is supported by instructors and the administration of medical schools^[13]. Pedagogies place an emphasis on active learning models that are centered on competencies^[14,15] such as exercises in the culinary arts, interactions within small groups, and direct participation in community service^[13].

The study focuses on evaluating the challenges encountered during the implementation of the new BSND curriculum. This evaluation is crucial as it helps educational institutions identify and address issues that may hinder the successful execution of educational reforms, in this case, the curriculum changes mandated by CHED Memo Order No. 14, series of 2017. When educators face challenges in implementing a new curriculum, it can impact the quality of education. Identifying these challenges allows for targeted interventions and support to enhance the teaching and learning experience.

This study was expected to answer the question: *What are the challenges faced by the administrators and teaching staff from Mindanao, Philippines in implementing the new BSND curriculum?* Furthermore, the succeeding sections provided the overview of the Philippine BSND curriculum, its purpose, and student's learning outcomes. Literature review discussed about the development of the curriculum, the outcome of the BSND graduates after a year, and how the curriculum could impact the learning of students. The methods section discussed the use of a mixed-method design, incorporating quantitative comparative analysis and qualitative thematic analysis to explore the challenges faced in implementing the new BSND curriculum.

Data were collected through a Likert-scale questionnaire and open-ended questions, with administrators selected via total enumeration and faculty through random sampling.

2. Literature review

2.1. Philippine BSND curriculum

The capacity of teachers to effectively execute or put into practice the prescribed curriculum is essential in curriculum implementation^[16-18]. This process is influenced, to some degree, by various factors including the teacher's qualifications, experience, knowledge, and abilities, as well as the accessibility of resources and motivational factors, among other relevant aspects. The term "curriculum implementation" is occasionally used interchangeably with the concept of "curriculum delivery"^[19,20].

The BSND curriculum in the Philippines focused on several concepts such as the Nutrition Education, Basic Nutrition, Nutrition Therapy, Assessment of Nutritional Status, Food and Nutrition Research^[12]. The curriculum also requires the students to undergo On-the-Job Training (OJT) in some industries including hospitals, community health centers and facilities, food service business.

In the CHED Memo Order No. 14 (s. 2017), HEIs could adopt minimum performance indicators for students. Students are expected to advocate the role of nutrition and dietetics for human well-being, practice comprehensive nutritional care, integrate nutrition concerns, manage nutrition programs, manage a foodservice unit, implement an economically viable activity for nutrition and diet, conduct scientific studies, uphold industries' ethical standards of the profession, and engage in lifelong learning activities^[21].

2.2. Learning outcomes in BSND

The nutrition education received during their undergraduate studies was insufficient in adequately equipping individuals for their current or desired roles within the industry. This is evident as many of them have assumed senior management positions that are not typically suitable for fresh graduates. Consequently, they have had to acquire additional skills and knowledge through postgraduate studies, internal training programs, or on-the-job experience^[22-24]. For the graduates who did not receive work integrated learning, they feel this as a "missing link" for their learning^[25].

While students may be introduced to soft skills, without hands-on instruction and demonstration, they may not develop the self-confidence necessary to effectively utilize these skills. One additional reason for individuals to be considered ineligible and unprepared for employment was the absence of work experience and necessary qualifications. This is particularly evident as only a limited number of trainees can participate in the highly competitive internship program following their completion of university studies^[26-28].

In the context of nutrition and dietetics in the Philippines, students were expected to establish their career in the health industry. Ramos et al.^[29] tracer study discovered that referrals were the main means by which BSND graduates obtained employment. Of the 19 individuals who provided responses, 31.6% are currently regular employees, 21.1% hold contractual or probationary status, 15.8% are self-employed, 10.5% are students, 10.5% are currently unemployed, and an additional 10.5% are engaged as volunteers. The authors believed the BSND program exhibits notable strengths, particularly in its effective career immersion opportunities and a comprehensive curriculum supported by dedicated faculty members. Conversely, it has been suggested that students should receive increased exposure to external institutions. The BSND program must uphold its capacity to equip students for their prospective professional endeavors.

In light of the nutritional status of the country, a significant gap remains to be addressed in tackling the ongoing issue of malnutrition^[30]. This situation underscores the necessity for an increased presence of

nutritionist-dietitians in the field^[31]. This gap in the literature highlights the need for further research to better understand how the curriculum is being applied in practice, the challenges educators and administrators encounter, and the effectiveness of its implementation in achieving the intended learning outcomes.

2.3. Factors affecting students' learning outcomes

Research findings have indicated that recently certified dietitians may encounter difficulties in securing employment due to a perceived surplus of graduates specializing in predominantly "traditional" fields such as clinical dietetics. This has been partially attributed to the stringent accreditation standards imposed on dietetic programs^[32,33]. These demands have heightened awareness of the importance of curriculum design and practice-based learning in supporting policy objectives and providing practitioners with the skills and competence needed to manage the ever-changing healthcare environment^[34].

In addition to supporting student-led initiatives like strategic career and instructional preparation, networking, employment and volunteer experience, many nutrition professionals have advocated for universities to specifically emphasize business and professional competencies and increase possibilities for work-integrated education^[23,35].

Collaboration between academic institutions, college students, and business to create new undergraduate programs or projects that focus employability skills across the curriculum. These partnerships seek to bridge the gap between both educational and professional settings and to improve students' awareness of demands in job settings^[36-40].

3. The current study

It was apparent from the literature analysis that limited studies were conducted on the implementation of the BSND curriculum in line with CHED Memo Order No. 14, series of 2017. This memo mandates specific competencies and curricular structures, yet there remains a lack of comprehensive research exploring how these guidelines are being implemented, particularly in the Mindanao region. Given this context, the present study seeks to address this gap by focusing on two main research questions.

1. What is the level of trust issues of BSND administrators and teaching staff in the implementation of the program?
2. Are there significant differences in the trust issues faced by respondents based on:
 - a. Academic Rank
 - b. Length of Service
 - c. Educational Attainment?

4. Methods

This study analyzed the challenges that the program administrators and faculty experienced regarding the implementation of new BSND curriculum. The data collected in this study provided a basis for further development of the curriculum especially in meeting the standard of learning as stipulated in the CHED Memo Order No. 14, series of 2017.

4.1. Research design

This study was a mixed-method research that used comparative design (quantitative) and thematic design (qualitative) in analyzing the challenges that the participants experienced. Comparing the

demographics of the participants could provide insights on the challenges they experienced. Demographical characteristics (academic/organizational rank, length of service, educational attainment) could potentially affect their level of perceived challenge in pursuing the new BSND curriculum.

Qualitative analysis involved an open-ended questions given to the participants to elicit more in-depth contexts about their challenges. This provided support for the quantitative data gathered through questionnaires. The questions gathered patterns and themes about the challenges and reflect them with the quantitative data and inferences.

4.2. Participants and sampling technique

This study surveyed two groups of participants. The first group consisted of the program administrators *i.e.*, the dean, department head/chairperson. The second group were the BSND faculty. This study compared their challenges to understand more the mediating factor of academic/organizational rank.

In this study, two sampling methods were applied based on the population size of the two groups being surveyed. For program administrators, a total enumeration approach was employed due to their limited numbers. Conversely, for faculty participants in HEIs, the sample size was determined using a percentage allocation method that accept 20% as the minimum acceptable size for a small population. Given the small population of program administrators, a 20% sample size was deemed appropriate for each HEI. Random sampling was conducted to select the participants by randomly picking their names in a sampling pool and each participants had equal chance to participate.

4.3. Research instrument

The research instrument used in this study was designed to gather essential information from the participants. Part I of the instrument collected their demographic profile (*i.e.*, their academic/organizational rank, length of service, educational attainment). Part II collected the challenges they experienced that used Likert-scale to code their responses into values. Part III was an open-ended question where the participants could explain more about the challenges they experienced.

There was no published questionnaire that could elicit the challenges in the implementation of BSND curriculum. To manage this limitation, the study developed a Likert-scale based on the known qualitative literatures and mapped their findings. This study initially analyzed the literatures related to curriculum implementation and instructional challenges^[41-43], mapped their findings, analyzed patterns, then came up with a questionnaire reflecting the challenges in instruction and implementation of curriculum. Additionally, the items were also aligned to the CHED Memo order no. 14, series of 2017 that discussed about the mandates of the implementation of the BSND curriculum.

The questionnaire was validated by a panel with 3 members that hold a doctorate degree in education. The validation process aimed to verify the consistency and comprehensiveness of the statements in relation to the objectives of the study.

4.4. Data gathering procedure

The researcher was required to obtain Research Ethics Clearance, a requirement to ensure the ethical implementation of the study. Additionally, the involvement of Public Health Nutritionists and the guidance of a supervisor specializing in food service studies were essential elements to consider.

The initial stage of the research involved seeking permission to conduct the study from the Presidents of HEI within the Mindanao Region. This formal request was conveyed through a well-drafted letter, highlighting the importance and purpose of the study. Once the necessary permissions were obtained, the

approved letter served as a crucial document when liaising with the Deans of Colleges that offered the Bachelor of Science in Nutrition and Dietetics (BSND) program.

On the designated date and time, as specified by the Dean of the College, the researcher proceeded to the research venue to conduct the study. At this point, the researcher initiated an essential step by seeking the informed consent of the participants. Each participant was provided with an Informed Consent Form and a Data Privacy Notice, ensuring they fully understand the conditions and implications of their participation. Only after participants willingly agreed to partake in the study by signing the Informed Consent Form and Certificate of Participation did the researcher proceed with questionnaire administration.

Only after participants willingly agreed to partake in the study by signing the Informed Consent Form and Certificate of Participation did the researcher proceed with questionnaire administration. This step was crucial as it respects the autonomy of the participants and adheres to ethical guidelines that protect their rights.

Following the acquisition of informed consent, the researcher began the questionnaire administration. Participants were assured that the information they provided would be treated with the utmost confidentiality. To further ensure confidentiality, the questionnaires were coded without using any personally identifiable information, and responses were stored securely. The researcher also explained the measures taken to protect data privacy, such as restricted access to data and the use of encrypted storage.

This data gathering was applied across all four HEIs within the Mindanao Region offering the BSND program. This approach ensured uniformity and ethical standards in data collection, emphasizing the commitment to rigorous research ethics and participant well-being throughout the study.

4.5. Data analysis

Quantitative Analysis

The questionnaire was designed to extract the item-based coded responses into numerical interpretations. This study used a quantitative analysis to compare the demographic variable of the participants.

Frequency and Percentage. Both were used to analyze the distribution of a set based on a given known universal set.

Weighted Mean and Standard deviation. The weighted mean (\bar{x}) was used to determine the intensity of the challenge/problem that the program administrators and faculty experienced. The standard deviation (σ) was used to analyze how close the participants' individual responses to the mean.

For the challenge metric, the descriptive interpretation was designed to give descriptions to the items. The criteria used in the computed mean scores were as follows:

Remarks	\bar{x}
Very Low	1.00–1.79
Low	1.80 – 2.59
Moderate	2.60 – 3.39
High	3.40 – 4.19
Very High	4.20 – 5.00

A **Student's t-test** is an inferential test used to compare the means of one or two populations/samples through hypothesis testing. This test can be used to compare the groups whether they differed in their paired measurements. This study used $\alpha=0.05$ as the basis for significance.

4.6. Qualitative analysis

In treating the qualitative data gathered through open-ended questions, this study used thematic analysis. Thematic analysis is a qualitative research method used to identify, analyze, and report patterns or themes within data. To conduct thematic analysis, the researcher familiarized themselves with the data, which involved reading and re-reading the narrative data. Next, the researcher generated initial codes by systematically coding interesting features of the data across the entire dataset. These codes represented the most basic elements of the raw data that appear meaningful in relation to the research question. After coding, the researcher searched for themes by collating codes into potential themes and gathered all data relevant to each potential theme.

5. Results

5.1. Demographics of the participants

Table 1 below presents the distribution of the data based on the demographics of the participants. As indicated, majority of the participants (88.1%; n=37) were BSND faculty while only 5 were program administrators.

Based on their length of service, 52.4% (n=22) had ≤5 years of experience while 47.6% had >5 years of experience. In terms of their educational attainment, 64.3% (n=27) had a master’s degree while only 35.7% (n=15) had a bachelor’s degree.

Table 1. Distribution of Data based on Demographics.

Demographics	Frequency (n=42)	Percent
<i>Academic/organizational Rank</i>		
Program Administrator	5	11.9
Faculty	37	88.1
<i>Length of Service</i>		
5 years and less	22	52.4
More than 5 years	20	47.6
<i>Highest Educational Attainment</i>		
Bachelor’s Degree	15	35.7
Master’s Degree	27	64.3

5.2. Challenges in the implementation of BSND curriculum

Table 2 presents the data on the challenges faced by the respondents in the Mindanao region in the implementation of the new BSND curriculum and the extent to which they face these challenges. The findings suggested that the administrators and teaching staff had *low* trust issues ($\bar{x} = 2.47$) in the implementation of the BSND curriculum. This indicates that they maintained a generally positive outlook on the implementation process, reflecting confidence in the curriculum's design and execution.

Table 2. Challenges in the new BSND Curriculum.

Statements/Items	n	\bar{x}	σ	Description
1. My master’s degree is not vertically articulated to my bachelor’s degree.	42	2.7857	1.6897	Moderate
2. There is no doctorate program in our institution and nearby institutions that is vertically articulated to my master’s degree and bachelor’s degree.	42	3.1190	1.7278	Moderate
3. The area of specialization of the doctorate degree in our institution is not in	42	3.2857	1.6861	Moderate

Statements/Items	n	\bar{x}	σ	Description
Nutrition and Dietetics and other allied fields				
4. My professional license is not yet updated.	42	1.3810	1.1884	Very low
5. I still did not finish my master's degree.	42	2.0476	1.7101	Low
6. I am not a Register Nutritionist- Dietitian.	42	1.7381	1.4825	Very low
7. I still do not have a regular item.	42	2.5714	1.8889	Low
8. Faculty members, full-time and part-time are encouraged to render hours of consultation with students.	42	2.8571	1.8422	Moderate
9. There is not enough instructional materials and books in nutrition and dietetics that are authored by Filipino practitioners.	42	3.1667	1.6064	Moderate
10. Library materials such as professional scientific/technical journals periodicals and magazines are not only inadequate but also outdated.	42	3.0000	1.4979	Moderate
11. Our institution has no MOA with an accredited Level III hospital for its practicum training program.	42	2.6429	1.7365	Moderate
12. We do not have a training manual for our On-the-Job-Training (OJT).	42	1.3571	0.8785	Very low
13. Our institution does not have a continuous Quality Improvement Program.	42	1.7381	1.2308	Very low
14. Our syllabus for each course is not outcomes-based.	42	1.8095	1.5339	Low
15. There is no nutrition clinic to serve as a laboratory where students can practice counseling and nutritional care	42	2.0952	1.7223	Low
16. The assigned health and nutrition workers for the community nutrition program do not accompany the students at all times during their fieldwork.	42	1.8810	1.1935	Low
17. The food service establishment does not have an RND under its employees who will supervise the food service practicum.	42	2.7143	1.6716	Moderate
18. Our institution does not have all or some of the specific laboratory equipment/supplies listed in CMO No. 14, series of 2017.	42	1.8333	1.3050	Low
19. Faculty lack in-service training, seminars, and the latest updates for the development of knowledge, skills, and practices in dietetics nutrition, food service, and public health nutrition.	42	2.2619	1.4493	Low
20. There are too many workloads for the faculty beyond Individual Daily Plan.	42	2.7619	1.2650	Moderate
21. The same faculty are requested to the conventions, seminars, training, and latest updates for the development of knowledge, skills, and practices in dietetics nutrition, food service, and public health nutrition.	42	3.0000	1.5772	Moderate
22. No opportunities to study outside the vicinity area for faculty.	42	2.9762	1.6452	Moderate
23. No proper forums for the faculty and middle administrator to properly disseminate of curriculum program.	42	2.5952	1.4825	Low
24. Faculty are expected to agree/follow with the middle administrators at all times.	42	3.0476	1.6520	Moderate
25. Faculty are expected to accept at any time the subject/load with no further objections or whatsoever.	42	3.1429	1.5706	Moderate
Composite Result	42	2.4724		Low

Legend: 1.00 – 1.79 Very Low; 1.80 – 2.59 Low; 2.60 – 3.39 Moderate; 3.40 – 4.19 High; 4.20 – 5.00 Very High

Table 2. (Continued).

There are nine (9) challenges that the respondents in the Mindanao region, especially the Deans, Department Heads, and Faculty face or encounter in the implementation of the BSND Curriculum but the extent to which they are affected by these challenges are only moderate. This speaks of the resiliency of the respondents amidst the challenges that they face. They are not affected very much or to a high extent. Instead, they can manage to comply with the minimum requirements, if not all the requirements. They can still

provide and continue with what is available for the successful implementation of the BSND curricular program.

Major challenges were the “*areas of specialization of the doctorate degree in our institution are not in Nutrition and Dietetics and other allied fields* ($\bar{x}=3.2857$)”, “*there is not enough instructional materials and books in nutrition and dietetics that are authored by Filipino practitioners*” ($\bar{x}=3.1667$), “*there is no doctorate program in our institution and nearby institutions that are vertically articulated to my master’s degree and bachelor’s degree*” ($\bar{x}=3.1190$), and the “*library materials such as professional scientific/technical journals periodicals and magazines are not only inadequate but also outdated*” ($\bar{x}=3.00$). Some also experienced that the “*faculty members, full-time and part-time are encouraged to render hours of consultation with students*” ($\bar{x}=2.8571$), “*my master’s degree is not vertically articulated to my bachelor’s degree*” ($\bar{x}=2.7857$).

The participants also noted about “*there are too many workloads for the faculty beyond Individual Daily Plan*” ($\bar{x}=2.7619$), “*the food service establishment does not have an RND under its employees who will supervise the food service practicum*” ($\bar{x}=2.7143$), and “*our institution has no MOA with an accredited Level III hospital for its practicum training program*” ($\bar{x}=2.64$).

Table 3. Inferential test results.

	Demographic	n	mean	σ	df	F	Sig.
Academic Rank	Program Administrator	5	2.4480	1.10794	40	0.075	0.941
	Faculty	37	2.4757	0.73162			
Length of Service	5 years and below	22	2.5806	0.75383	40	0.010	0.417
	Above 5 years	20	2.3841	0.80010			
Educational Attainment	Bachelor's degree	15	2.6424	0.77480	40	0.182	0.338
	Master's degree/higher	27	2.4007	0.77294			

Legend: 1.00–1.79 Very Low; 1.80 – 2.59 Low; 2.60 – 3.39 Moderate; 3.40 – 4.19 High; 4.20 – 5.00 Very High

*significant at $p \leq 0.05$

Inferential analysis in **Table 3** indicated that no difference was observed on the challenges of the program administrators and faculty based on their demographic profile academic rank ($p=0.941$), length of service ($p=0.417$), and educational attainment ($p=0.338$). Generally, the perceived challenge of the faculty and staff ranged from low to moderate only, but they were primarily concerned on the absence of program offering in the HEIs in the Mindanao region aligned with their Baccalaureate degree. For them, having this could strengthen the implementation of the new BSND curriculum program, professional advancement and qualifications of both the administrators and the faculty to be able to meet the minimum requirements of the CHED Memo order no. 14, series of 2017.

Specifically, in **Table 4** below, narrative analysis of faculty and administrators revealed that majority of the challenges were about qualifications of their department heads and absence of PhD program for nutritionists and dieticians. Some also noted no vertical articulation (vertical skill development) among their faculty, limited training and seminars, and overloading of teaching units. Others pointed out limited laboratory rooms for instruction and demonstration, insufficient teaching resources, and no improvement in laboratory equipment.

Table 4. Thematic Analysis on the Challenges.

Areas of Concern	Themes Emerged	n
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Program Administrator	*Qualification of Dean and department heads	15
	*Absence of Ph.D. program offering in Nutrition and Dietetics	10
	*Teaching load of program head and dean	5
	*Relationship with the faculty	5
	*Limited budget ceiling provided to the college	1
Faculty	*Security of Tenure	9
	*Training and seminars for faculty	7
	*No vertical articulation of master's degree attained	6
	*Faculty loading	5
Curriculum and Instructions	*Congested Major subjects in the Third-year level	16
	*Limited subjects in Public Health Nutrition	5
	*No areas of specialization	5
Internship/Practicum Training Program and Accreditation of Facilities	*No available level III accredited hospital	30
	*Expensive affiliation fee	4
	*No internship/practicum training outside of the city	2
Laboratory and Physical Facilities	*Inadequate laboratory rooms and equipment for the growing number of students	15
	*No improvement was seen in terms of laboratory equipment	5
Admission, Selection, and Retention of Students	*No ND qualifying exam (Aptitude Test) for incoming freshmen	30
	*No requirement for STEM Strand graduates to be admitted to the BSND program	10
	*BSND course as a steppingstone to shifting to Nursing	2
Library	*Not enough books related to nutrition	7
	*Limited access to journal publication	7
	*No mini library in the college	3

Table 4. (Continued).

6. Discussion

Several studies also pointed some challenges in the implementation of a curriculum. This study indicated that limited specialization was available for a doctorate degree. For Mandukwini^[44], enhancing the professional status and treatment of teachers contributes to the enhancement of educational quality. For a curriculum to work effectively, teachers' instructional techniques and supportive interactional approach in fostering children's active engagement in the learning process are necessary^[45-49]. This study revealed that the challenges in implementing the new BSND curriculum centered more on the professional development and trainings of teaching staffs.

It is natural for human beings to feel anxious when dealing with challenges, as uncertainty and fear of failure often trigger emotional and physiological responses that heighten stress levels and affect decision-making. Individuals exhibiting high levels of self-esteem generally experience affirmative emotions regarding their self-concept. Conversely, those with diminished self-esteem often grapple with adverse feelings about themselves, which can endure despite their perceptions of high competence^[50]. For example, those who encountered higher-quality online learning at their university reported stronger self-efficacy in teaching online throughout the shift to distance teaching^[51]. In this paper, similar phenomenon was observed among BSND teachers and administrators. Apparently, because they feel less challenged by the implementation of the program, they exhibit greater confidence in its outcomes, likely due to their familiarity with the curriculum requirements and their ability to effectively manage any obstacles, which in turn developed a positive outlook on the program's success and its long-term impact on student achievement.

Similar to Unga^[52], who found out that program administrators and faculty demonstrated high levels of confidence and positivity regarding the implementation of the new BSND curriculum, this paper also observed low trust issues surrounding the curriculum's implementation, suggesting that stakeholders generally feel assured in its success. Future studies could explore how confidence and trust issues in curriculum implementation influence not only the overall effectiveness of the program but also its direct impact on student outcomes, such as academic performance^[53] and skill development^[54].

The current study revealed that the primary challenges in implementing the new BSND curriculum were related to the professional development and training of teaching staff. Without adequate training, teachers may struggle to adopt and effectively deliver the new curriculum, leading to suboptimal educational outcomes. This indicates a need for targeted professional development programs that equip educators with the necessary skills and knowledge to implement the curriculum successfully.

Other challenge involved the availability of learning resources considering the shifted learning contents taught under the new curriculum. The teachers and program administrators noted that there were inadequate and outdated resources in their library. Teaching and learning materials are utilized by educators in the classroom setting to facilitate efficient and comprehensive student learning^[55]. These tools serve as instruments utilized for the delivery of knowledge within an educational setting^[56]. Inadequate learning materials could significantly impact the learning process and affect the productivity of the students in learning industry-based contents^[57-59].

Challenges reflect broader operational and implementation issues within the college and the department offering the BSND program. Problems such as faculty overloading, lack of job security and tenure, insufficient training and seminar opportunities, budgetary constraints, and inadequate resources and facilities all play a role. Additionally, issues with internship/practicum opportunities, admission, selection, and retention processes, as well as interdepartmental relationships, were also mentioned as contributing factors.

The identified concerns/challenges were one way or the other a reflection of how the college and the department offering BSND were operationalized and implemented in terms of the faculty loading, security, and tenure, training and seminars, budgetary ceiling, inadequate or limited books, equipment and facilities, internship/practicum, admission, selection, and retention and even the relationship with others were also mentioned.

Addressing these challenges requires a holistic approach that includes increasing funding for educational resources, enhancing professional development opportunities, improving infrastructure, and fostering better interdepartmental collaboration. By tackling these issues, educational institutions can ensure that the curriculum is implemented more effectively, ultimately leading to higher educational quality and better student outcomes. The study underscores the importance of continuous assessment and adaptation of educational strategies to meet evolving needs and challenges.

This study focused more on the challenges of implementing the new BSND curriculum. This study opened new questions about how to address these challenges within institutional levels. There was a need for more effective quantitative analysis that covers several mediators and predictors of curriculum efficacy *e.g.*, finance availability, teacher's self-efficacy, student's performance in licensure exams. Extending the analysis across these variables would make the findings extensive and relevant to curriculum development and reconfiguration.

7. Conclusion

The findings of this study shed light on the connection between trust issues and the effectiveness of the implementation of the new BSND curriculum. The continuous problems connected to professional development and the availability of resources highlighted the importance for ongoing support and training, despite stakeholders, such as teachers and program administrators, have shown an improved level of confidence in the potential outcomes of the curriculum. It is essential to address these concerns to cultivate a more efficient educational environment and to ensure the curriculum achieves the objectives that it was designed to achieve.

It is suggested that educational institutions place a high priority on professional development and provide sufficient resources to enhance the level of confidence and trust that is present among professors and administrators at the time of curriculum implementation. It is possible for educational institutions to improve the effectiveness of their curriculum by making investments in specialized training programs and expanding access to contemporary instructional resources. This will ultimately result in improved learning outcomes for students. In addition, the establishment of a culture that encourages collaboration and open communication among faculty members can further reduce trust difficulties, which ultimately results in more efficient delivery of the curriculum.

Despite the valuable insights provided by this study, there are notable limitations that should be acknowledged. The focus on the challenges of implementing the BSND curriculum may overlook other factors that could also influence its efficacy, such as institutional policies and broader educational contexts. Additionally, the stringent nature of the methods may limit the generalizability of the findings. Future studies should consider a mixed-methods approach that incorporates quantitative analyses of variables such as financial support, teacher self-efficacy, and student performance on licensure exams, which could provide clear picture of the factors influencing curriculum implementation.

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