

## Career Pathways and Employment Outcomes of BSBA Graduates Class (2011-2019): A Tracer Study from NEMSU

Romel C. Nemiño<sup>1\*</sup>, Fe. G. Villamor<sup>2</sup>, Sharon May. R. Gibertas<sup>3</sup>

- <sup>1</sup> Associate Professor V, Department of Business and Management, North Eastern Mindanao State University, Tagbina, Surigao del sur, Philippines, 8308  
<sup>2</sup> Associate Professor IV, Department of Business and Management, North Eastern Mindanao State University, Tagbina, Surigao del sur, Philippines, 8308  
<sup>3</sup> Instructor II, Department of Business and Management, North Eastern Mindanao State University, Tagbina, Surigao del sur, Philippines, 8308

\* Corresponding author email address: rcnemino@nemsu.edu.ph

### Article Info

#### Article type:

Original Research

#### How to cite this article:

Nemiño, R. C., Villamor, F. G., & Gibertas, S. M. R. (2026). Career Pathways and Employment Outcomes of BSBA Graduates Class (2011-2019): A Tracer Study from NEMSU. *Journal of Adolescent and Youth Psychological Studies*, 7(5), 1-16.  
<http://dx.doi.org/10.61838/kman.jayps.3826>



© 2026 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

### ABSTRACT

**Objective:** This study intended to examine the total population of college graduates from the BSBA Financial Management (FM) and the Human Resource Development Management (HRM) programs who firmly committed to develop North Eastern Mindanao State University (NEMSU) also known previously as Surigao del Sur State University (SDSSU) to be their main path for access to higher education in the year of 2030, and in an international “global” setting. Specifically. The objective of the study is to analyze the career development pathways of the BSBA batch of 2011–2019.

**Methods and Materials:** The descriptive research approach was used in this study to precisely describe the graduates of BSBA 2011-2019 of North Eastern Mindanao State University (NEMSU), Tagbina campus. Another example of sample survey implementation is managing the scope of the study to the manageable fraction of the bigger population and able to find few key insights. Additionally, a part of the study is also dedicated to the opinion survey, as most variables relates around what respondents have seen and perceived. The type of descriptive research approach was relevant in this study, because the question is determined by determining the graduate status needed by description related to the condition of the current graduates. The tracer study was descriptive in nature, used to understand the career trajectories, job satisfaction, and professional achievement of graduates. The education institution applied this approach in order to get a more realistic perception regarding the career path of its graduates from the graduation period to make rational decisions related to updating the curricula or designing appropriate career services for the students. These studies incorporate descriptive analysis even hinting towards trends and patterns that are not only useful for benchmarking but also for measuring the efficacy of programs.

**Findings:** The employment data indicates that 73% of the respondents who remain in the country are in some form of regular or permanent employment.

Between 1 and 2 months was the average time it took the graduates to get their first job, and it was reported that they spent less than 6 months in their first positions

**Conclusion:** The study also reveals the prevalence of clerical support staff in both groups and stresses that there is greater need for more industry relevant curricula so as to enable graduates secure jobs as well as progress in their careers. These factors prove that tracer studies serve a great purpose in the modernization of learning structures.

**Keywords:** *Tracer Study, Financial Management, Human Resource Development Management, Sustainable Development Goals,*

## 1. Introduction

Employment in the Philippines is affected by many factors along with legislative measures like RA 10691 and amending RA 8759, which seeks to increase job prospects through public employment service offices (Bachita & Bayoneta, 2021). Employment level in the country is responsive to GDP changes (Bustos, 2024). Youth unemployment together with a mismatch between educational training provided and current labor market provisions qualifies some graduates as unemployed; students lack sufficient skills from some institutions (Mseleku, 2021). Youth unemployment is one of the major issues in the Philippines worsened by poor skills, lack of experience and underemployment (Igarashi & Acosta, 2022). The unemployment of young people, productivity deficit, and bottleneck formations in development are detrimental effects of job mismatch on the labor market in the Philippines (Acut et al., 2021). The redundancy of many programs not honing students with transferable skills required by employers further widens these gaps (Khan & Mojokury, 2021) as fast-changing technology and fragmented curricula in higher education compound the job shortage mismatch.

In the face of mismatch between the skills of the graduating students and the requirements of the labor market, this has led to brain drain as these same students would rather take jobs that do not require them to fully utilize their qualifications just as long as such jobs are available in the market (Acosta et al., 2020). Tracer studies, which the Commission on Higher Education (CHED) (Sayson et al., 2024) mandates are essential pieces in evaluating Philippine educational institutions' effect on their graduates' work (Sayson et al., 2024). They provide vital inputs to align converted competencies to the job requirements and assist institutions and labour markets to resolve jobs-sort (Toquero & Ulanday, 2021). Curriculum tracer studies inform how educational programs should be amended to minimize misfits and enhance the economic

returns in the better matching of available skills demand (Posadas et al., 2021) It helps with the assessment of what is being offered versus what the current industry needs; therefore, shaping the modifications in studies.

Problems in the Philippines' general labor market need to be addressed, such as the high youth unemployment rate, the mismatch between the demand and supply of professional skills, and underemployment rates. Despite several legislative and higher education efforts to achieve the right balance, job mismatch still hinders productivity and growth in the sector. Such gap needs to be bridged where academic courses and industry needs can be harmonized through adult education and professional development. Developing the appropriate skills, talents, and capacity among graduates, building a skilled workforce without the risk of brain drain, and supporting sustainable economic development, are all key focus areas. Tracer studies required by the Commission on Higher Education assess whether graduates are employed or not after graduation and serve, in return, as a crucial source of information on how and what curricula need to be schooled or pushed over to suit the demands of the current market. To this end, higher education institutions should focus on education for adults and continuing professional education, in part to address the gap between the competencies graduates have when they become productive members of the labor market and the competencies that employers require. This study was designed to measure the employability and career adjustments of BSBA graduates over a nine-year span.

## 2. Methods and Materials

Particularly in changing the BSBA curriculum to better fit industry demands and employer expectations, the study sought to offer baseline data that might direct academic and administrative decisions. Observed to guarantee the integrity of the research process and the preservation of participants' rights were ethical issues including informed permission and confidentiality of information.

### 2.1. Research Design

This tracer study utilized a descriptive research approach to collect and evaluate data regarding the job outcomes of the BSBA graduates from 2011 to 2019 and its impact of the BSBA program at North Eastern Mindanao State University Tagbina Campus. Other than the demographic profile, the main objective was to assess the employment status of the graduates, their present lines of business, their occupational classifications, and the alignment of the graduates' present occupations in line with the CHED Memorandum Order 17 series of 2017.

The primary data-gathering instrument was a structured survey form sent via direct correspondence. Purposive sampling helped choose the respondents depending on their availability and eagerness to take part. Respondents were identified through university records, alumni databases, and social media platforms. Descriptive statistics including frequency, percentage, and mean were used to assess quantitative data; qualitative comments were looked at for shared themes and insights.

### 2.2. Participants of the Study

The respondents in the study were graduates of BSBA from 2011-2019. Out of 599 BSBA graduates, 282 respondents responded through the social media site. This facilitated the collection of rich data on each graduate's employment outcome and career trajectory. The census mechanism also was relevant because surveying the entire population is relevant when trying to deliver complete and real picture of the career path of all the business administration graduates from 2011-2019. As such, the collation of thorough data offered valuable insight into the career journeys of the successful graduates — a key discovery to guide future educational and career development initiatives across the institution.

### 2.3. Research Instrument

The main tool utilized for data collection in this tracer study was a structured questionnaire featuring closed-ended questions. The format was adopted and tailored from the standard tracer study instrument created by the Commission on Higher Education (CHED). Closed-ended questions were employed to maintain consistency in responses and to streamline the tabulation and analysis of quantitative data. The instrument covered key areas such as the demographic and employment profile, major line of business, their current

occupational classifications, and the alignment of the graduates' current occupation to their degrees earned. The instrument was subjected to content validation by six experts to ensure its validity: the faculty member of the department, the Department Chair of the Business Administration program, the Dean of the College of Business and Management, and three external validators from the industry who possess extensive experience in human resource management. The validators conducted a thorough review of the questionnaire to assess its relevance, clarity, and alignment with the objectives of the study. Feedback was integrated, and essential modifications were implemented prior to the administration of the final version. The content analysis was measured using Lawshe's Scale – Content Validity Index (CVI) which generated a result of 0.83. To ensure reliability, the instrument underwent a pilot test with to 30 alumni from the Department of Computer Studies who formed part of the exclusion criteria. The analysis

of the responses employed Cronbach's Alpha to assess internal consistency, resulting a coefficient of 0.89, which signified an acceptable level of reliability.

### 2.4. Data Collection

The data collection for this tracer study was executed over a two-month period via an online methodology. Owing to the geographic dispersion of BSBA graduates from 2011 to 2019, many of whom are currently employed in diverse locales regionally and abroad. The principal method of data collecting was via digital platforms. The validated survey questionnaire was transformed into a Google Form to facilitate convenient and accessible response submission. The survey link was distributed through social media sites like group chats with the use of the Messenger and Facebook as these are effective means for engaging alumni. In certain instances, email and text messaging using the Short Message Service (SMS) were utilized to communicate with graduates whose contact information was accessible in the university's department alumni database. Efforts were undertaken to optimize participation by collaborating with the program coordinators of the BSBA who facilitated the distribution of the questionnaire to their former students. Periodic reminders were dispatched to stimulate responses and guarantee an adequate return rate. During the data collection process, confidentiality and ethical norms were rigorously upheld. The study noted important values like informed permission, free will, and response secrecy. Attached to the questionnaire was a cover letter explaining the goals of the

study, their rights as volunteers, and the guarantee that their answers would be used just for scholarly purposes. The respondents were apprised of the voluntary nature of their involvement but were greatly encourage and guaranteed confidentiality of their data. Responses were systematically aggregated and kept in a secure database, prepared for statistical analysis employing descriptive methodologies. The method of data collecting proved to be a main restriction for the study. Many of the target respondents—graduates from 2011 to 2019—were already employed and living outside of the municipality, hence the data collecting was mostly done online using Facebook Messenger, email, and Google Forms. This strategy limited access to graduates who lacked internet connection or who were inactive on social media, therefore influencing the general response rate and sample representativeness.

**2.5. Data Analysis**

The respective categorical data were analyzed using descriptive statistics. Frequency count was used for the systematic summary and analysis of categorical data. This statistical technique counted the number of times each category or value appeared in the dataset, henceforth making provision for ordered and more transparent data interpretation.

**3. Findings and Results**

**3.1. Demographic Profile of the Respondents**

The tracer study analyzed the demographic attributes of 282 BSBA graduates from North Eastern Mindanao State University Tagbina Campus, indicating a primarily youthful, female, and economically moderate graduating cohort. A plurality (57%) of the respondents were aged 26–30 years,

followed by 26% aged 31–35, 14% aged 21–25, and merely 2% aged 36 and older. The data suggest that the university has generated a predominantly young workforce, many of whom are probably in the early to mid-phases of their careers.

The gender distribution among respondents revealed a significant female majority, with 59% identifying as female and 41% as male, indicating an 18% greater representation of female graduates. The gender disparity indicates a potential trend of increased female enrollment in business-related programs throughout the study period.

Regarding civil status, 61% of the respondents were single, 36% were married, a tiny percentage classified as single parents, married but not living together, or widowed (each comprising 0.4%).

Data on income distribution showed that 46% of the graduates made monthly between ₱10,001 and ₱15,000; 22% made ₱15,001 to ₱20,000; less people fell into the higher income ranges. This suggests that a lot of recent grads land entry-to mid-level jobs.

The majority of the respondents (n = 266) held BSBA degrees, whereas a minority had engaged in further studies or obtained teaching credentials. Nine individuals completed education units, four enrolled in master’s programs in education, and two passed the Licensure Examination for Teachers (LET). One respondent had completed a master’s degree in education, indicating a level of upward academic mobility. Among the graduates, 52% specialized in Financial Management (FM), and 48% focused on Human Resource Development Management (HRDM). This indicates a rather equitable distribution; nonetheless, the marginally greater percentage of FM graduates may signify changing student interests or projected job prospects in the finance sector

**Table 1**

*Demographic Profile of the Respondents*

Characteristics	Frequency	%
Age		
26-30	161	57
31-35	74	26
21-25	42	14
36 and above	5	2
Total	282	100
Sex		
Female	166	59
Male	116	41
Total	282	100
Civil Status		

Single	173	61
Married	100	36
Single Parent but not Married	7	3
Married but not Living Together	1	4
Widow	1	4
Total	282	100
Gross Monthly Income		
₱10,001 to less than ₱15,000	128	46
₱15,001 to less than ₱20,000	62	22
₱20,001 to less than ₱25,000	39	14
₱25,001 to less than ₱30,000	22	8
₱35,001 and above	21	8
₱30,001 to less than ₱35,000	10	4
Total	282	100
Major		
FM	147	52
HRDM	135	48
Total	282	100
Educational Attainment		
BSBA Graduate	266	94
With education units earned (teacher certificate program)	9	3
With masteral unit earned in Education	4	1
Passed the Board Licensure Examination for Professional (LPT)	2	1
Master's degree holder in Education	1	1
Total	282	100

The demographic profile tells us that the majority of people taking this survey are between the ages of 26-30, which is significant as; they can be considered low-mid level talent, they have only recently transitioned from education to working in professional roles therefore are active job seekers. This coincides with (Kalaw, 2019) where they focused more on the employability of graduates within a certain age bracket, which all mirrors the high number of those youth numbers in the population. What this means is that this new group of younger alumni may experience different challenges or advantages in the workforce. It may also be indicative of a wider employment-related trend, for example, a delay in labour market entry due to economic instability or increasing access to higher-level qualifications. Dec 3, 2023: This is a testament to how much this segment continues to be important in conversations about employability, workforce readiness and the kind of facilitation these young professionals would require to navigate their careers.

Next to the age-related demographics, the gender distribution of the respondents add depth to the results obtained in this study. It appears that almost all of the respondents were females, which holds on very strong female presence. The tracer study of Valdez et al. (2023), the authors argue that a considerable number of graduates are women. They have different career progression issues than men do (Valdez et al., 2023). The same finding is also

seen on the employability of graduates in teacher education where another previously mentioned portion predominantly female was discovered in the population that the authors surveyed (Posadas et al., 2021).

The civil status of the respondents in this study was most likely single, as in Mendoza et al. (2023), which also showed that a substantial percentage of management graduates were single as well (Mendoza et al., 2023). In addition, the results of the study of Victoriano et al. In fact, in a study conducted by Ballardino et al. (2022) that set out to describe the graduates' profiles, it was found that most of the graduates were single, which corroborated the findings of this study.

The demographic profile of the respondents here based on the gross monthly income category shows that a significant number of alumni earned a monthly salary between 10,001 and 15,000 pesos (Philippine currency) similar to the study of Pentang et al. (2022), 46% of respondents report making similar figures (Pentang et al.). Furthermore, Kresnawati et al. The higher education statistics break down graduates by faculty and demographic data, confirming with context that many graduates earn in this range (Kresnawati et al., 2021).

Financial Management (FM) graduates ranked higher in number, while Human Resource Development Management (HRDM) graduates ranked lower, as per the demographic background of the respondents in this study, which is

consistent with the tracer study of Albina and Sumagaysay (2020), where graduates who selected in the Information Technology Program exhibited an increased tendency to fit into financial management positions, further supporting the observation that FM scored higher in employability-related percentages, as compared to HRDM (Albina & Sumagaysay, 2020). Victoriano et al. (2021a,b) provide further evidence in this direction (Victoriano et al., 2022).

Respondents demographic profile in this study has showed that a total of 282 respondents had a greatly considerable number of BSBA graduates. Contextualized with the tracer study by Austero et al. It was stated in (Austero et al., 2012) in which the demographic profile of the higher education institutions in the region also showed that there were a significant number of graduates who had finished business-related programs which suggested that the educational system of the country, the Philippines is highly

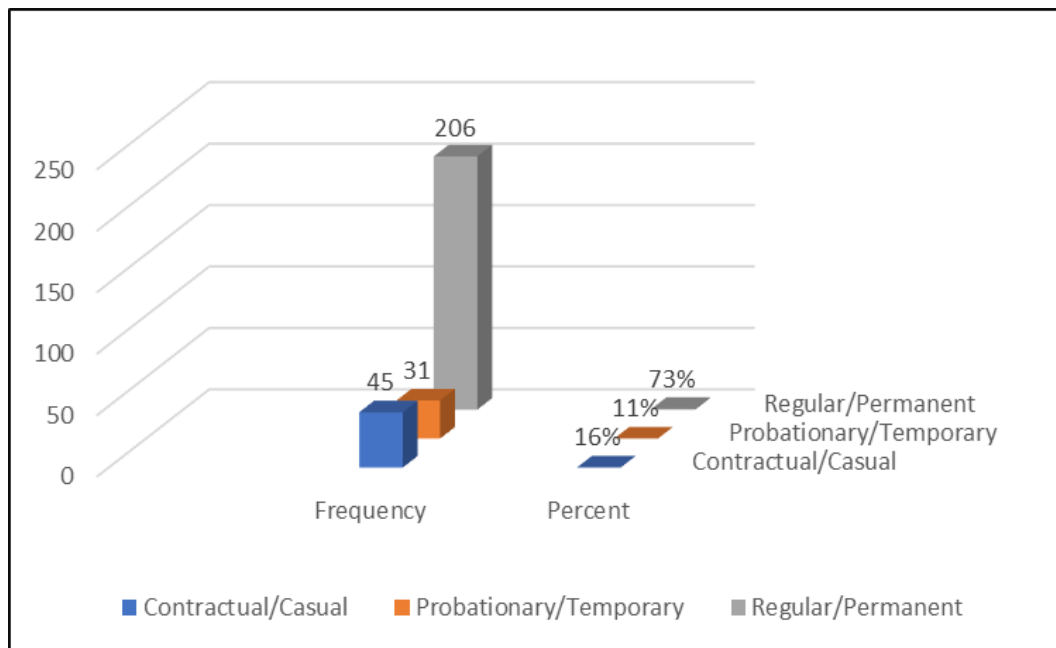
influenced by the perceived employability and market demand of the businessmen in the country. Roman and Villanueva's (2023) study revealed that business administration degrees were obtained by most graduates from state universities in the Calabarzon area, which in turn indicated the high prevalence of this particular degree in the region (Roman & Villanueva, 2023).

### 3.2. Status of Employment

The bar graph above depicts the distribution of job status among Bachelor of Science in Business Administration (BSBA) graduates from North Eastern Mindanao State University–Tagbina Campus from 2011 to 2019. The data classifies graduates into three employment categories: Contractual/Casual, Probationary/Temporary, and Regular/Permanent.

**Figure 1**

*Status of Job Distribution*



The elevated rate of graduates obtaining regular or permanent work serves as a robust measure of the long-term employability and competitiveness of the BSBA program. A 73% regularization rate indicates that graduates are not only securing employment but are also likely thriving and attaining long-term positions within their firms. This positively reflects on the curriculum, the skills taught, and the general employability of the graduates. A minority of respondents (27%) are engaged in contractual and

probationary employment, a situation frequently encountered by early-career professionals. These employment forms frequently function as gateways, particularly in governmental and business sectors, where job security is achieved by fulfilling designated performance standards over time. Contractual/Casual (16%): This statistic suggests that certain graduates encounter difficulties in securing permanent employment or opt for flexible work arrangements. This may also result from industry-specific

practices or regional labor market trends. Probationary/Temporary (11%): These graduates are anticipated to achieve regularization, subject to assessment intervals. The data indicates that the BSBA program has effectively aligned with job market expectations. The significant rate of permanent employment suggests that businesses appreciate the skills of NEMSU–Tagbina graduates, thus affirming the program's relevance.

To enhance employability outcomes, the institution should consider fortifying business connections, providing career assistance services, and including soft skills training into the curriculum. A subsequent qualitative study may be beneficial to investigate the determinants affecting graduates' shift from temporary to permanent work. The data substantiates the merit of the BSBA program at NEMSU–Tagbina, demonstrating that a considerable percentage of its

graduates attain stable employment within a few years post-graduation. Nonetheless, ongoing curriculum evaluation, labor market assessment, and graduate support programs are crucial for improving graduate outcomes.

3.3. *Employment Profile of the Respondents*

Table 2 provides a comprehensive analysis of the job profiles of graduates from North Eastern Mindanao State University- Tagbina Campus, particularly those from the cohorts of 2011 to 2019. The data delineates several critical indicators: employment location, duration before securing the initial job, tenure in the first position, and frequency of work changes. Each of these factors offers insight into the employability, job security, and career progression of the graduates.

**Table 2**

*Employment Profile of the Respondents*

Variables	Frequency	%
<b>Place of Employment</b>		
Local	263	93
Foreign/Abroad	19	7
Total	282	100
<b>Time Waited before Landing the First Job</b>		
1 to 2 months	128	45
Less than a month	90	32
7 to 11 months	25	9
1 year to less than 2 years	23	8
3 years to less than 4 years	10	4
2 years to less than 3 years	6	2
Total	282	100
<b>Length of Stay in the First Job</b>		
1 to 6 months	66	23
3 years to less than 4 years	54	19
2 years to less than 3 years	45	16
1 year to less than 2 years	41	15
More than 4 months	41	15
7 to 11 months	30	10
Less than a month	5	2
Total	282	100
<b>Number of Times Employed</b>		
This is my second job	96	34
This is my third job	78	28
This is my first job as well as my present / latest job	58	21
This is my fourth job	23	8
This is my fifth job	20	7

More than 5 times	7	2
Total	282	100

The vast majority of graduates (93%) are employed domestically, whilst a little fraction (7%) is employed internationally. This pattern indicates that graduates are either more predisposed to choose employment in the Philippines or that foreign job chances may be constrained by reasons such as qualifying criteria, language obstacles, or insufficient international job placement services. The elevated local employment rate may indicate the significance of the programs provided by NEMSU-Tagbina Campus to the regional or national labor market, especially within the CARAGA region. The institution greatly contributes to local workforce development and economic activities.

A notable 77% of respondents successfully obtained their first employment within two months or fewer post-graduation, reflecting the strong employability of graduates. This swift entry into the labor market indicates graduate’s preparedness for entry-level positions and implies that the institution’s curriculum and training programs are well linked with industry demands. Nevertheless, 23% of graduates had delays exceeding two months, while a little yet significant 6% required more than two years to secure employment. Prolonged waiting periods may indicate industry saturation, geographic employment constraints, insufficient job search assistance, or a misalignment between capabilities and market demands. Subsequent interviews or qualitative data may provide enhanced understanding of these delays.

The data reveals a heterogeneous pattern for employment stability. A notable percentage (23%) departed from their initial employment within six months, with an additional 10% leaving between seven to eleven months, culminating in a total of 33% of graduates who remained for less than one year. This indicates that one-third of graduates saw early job turnover, potentially due to discontent, work misalignment, inadequate salary, or temporary/contractual employment. Conversely, around 49% retained their first positions for 1 to 4 years, and maybe longer (assuming the “more than 4 months” group included “more than 4 years”),

suggesting that a significant proportion of graduates secured satisfactory or stable work. This retention indicates favorable alignment between graduates’ qualifications and their employment duties. Nonetheless, the comparatively elevated turnover during the initial year warrants further investigation to improve job placement services or to align job expectations.

The job mobility rate among graduates is notably elevated. Only 21% retained their initial employment, and 79% have changed positions at least once. The predominant trend is transitioning to a second (34%) or third (28%) job, possibly indicative of a quest for enhanced employment prospects, professional progression, or improved working circumstances. This degree of mobility aligns with overarching labor market trends, particularly among young professionals, and may signify robust professional advancement rather than job insecurity. Nevertheless, a minor segment (9%) has transitioned between jobs four or more times, indicating either an unstable work trajectory or proactive career exploration. Analyzing the factors influencing job transitions (e.g., promotion, contract conclusion, relocation, unhappiness) may yield deeper insights into the quality of graduate employment.

The job profile of NEMSU–Tagbina Campus graduates from 2011 to 2019 indicates a predominantly favorable outcome for employability and workforce integration. The majority secure local jobs shortly after graduation. Numerous individuals remain in their initial positions for several years or successfully shift to superior chances.

3.4. *Major Line of Business of the Respondents Present Employment (FM)*

Table 3 illustrates the sectors in which the 147 respondents from NEMSU–Tagbina Campus are currently employed. The data highlights the variety of industries and demonstrates the versatility and relevance of the graduates' talents across many sectors.

**Table 3**

*Major Line of Business of the Respondents’ Present Employment (FM)*

Major Line of Business	Frequency	%
------------------------	-----------	---

Wholesale and Retail Trade including sale and repair of cars, motorcycles, personal and household goods, appliance centers (EMCOR, Desmark, and the like)	32	22
Financial Intermediation (Palawan Express, RD Pawnshop, etc.)	21	14
Local Government Unit (Cities, Municipalities, Barangay Levels)	17	12
Cooperative	14	10
Agriculture, Hunting, Fisheries, and Forestry	8	5
Armed Forces (PNP, Army, AFP, etc.)	8	5
National Agencies (e.g DepEd, CHED, DENR, BIR, SSS, DSWD, etc.)	6	4
Electricity, Gas and Water Supply	4	3
Hotels, Restaurants, Resort, and Tourism	4	3
Private Banks (BDO, Metro Bank, Security Bank, etc.)	4	3
Business Process Outsourcing (BPO)	3	2
Construction	3	2
Pharmaceutical	3	2
Real State, Renting, and Business Activities	3	2
Domestic Helper Household Employment (DHE)	2	1
Insurance	2	1
Logistics, / Express Courier / Cargo (LBC, J&T, etc.)	2	1
Manufacturing	2	1
Non-Teaching Personnel (Basic Education to Tertiary Levels in the government)	2	1
Private Education (Non-Teaching: Basic Education to Tertiary Levels)	2	1
Transportation	2	1
Consultancy Services and Engineering	1	1
Manpower and Janitorial Services	1	1
Private Hospitals, Clinics	1	1
Total	147	100

The leading four sectors jointly represent 58% of the graduates' current employment. *The Wholesale and Retail Trade sector is the major employer, accounting for 22% of employment.* This indicates that numerous graduates have secured positions in sales, customer service, inventory management, or administrative sectors. The sector is accessible, provides a range of entry-level opportunities, and is resilient in both urban and rural regions. *Financial Intermediation (14%) occupies the second position,* signifying robust employment within pawnshops, remittance centers, and various microfinance firms. This indicates a fundamental proficiency in financial literacy and client transaction management among graduates. *Employment in Local Government Units (12%) indicates a substantial segment of graduates pursuing careers in public service,* presumably in administrative, planning, or community development positions. This is particularly pertinent for graduates of regional state universities who may choose to assist their local communities. *The Cooperative sector (10%) is also prominent,* indicating significant participation in community-oriented or member-driven economic entities.

Approximately 22% of respondents are working in the governmental or public sector, encompassing armed forces and non-teaching educational positions. This robust representation illustrates the function of public colleges in equipping graduates for civil service, education, and

uniformed services, which frequently constitute solid and enduring career trajectories.

These sectors represent a minor proportion of employment yet illustrate the variety of industries into which graduates have transitioned. Significantly: The BPO and pharmaceutical sectors indicate opportunities in specialized skill sets or urban labor markets. Real estate and construction indicate involvement in property and infrastructure development. Utilities and logistics provide steady, technical career trajectories. These topics may present future potential for curricular alignment or relationship development with industry stakeholders.

Notably, direct work inside the education sector, especially in teaching positions, seems restricted in the sample, with merely 4 respondents (3%) occupying non-teaching professions. The inclusion of education degrees in NEMSU-Tagbina's program offerings may indicate either insufficient demand or a discrepancy in reporting. Alternatively, it indicates that the majority of graduates seek positions beyond the classroom or in more extensive administrative capacities.

These sectors indicate the minimal rates of graduate employment. This may indicate a scarcity of possibilities or interest in these areas, but it could also signify specialty mismatches or nascent industries that are not yet widely available in the region. Table 3 presents numerous

significant trends in the employment trajectories of NEMSU-Tagbina alumni. A pronounced preference for retail trade, financial services, and government jobs signifies regional economic conditions and the adaptability of the graduates' skill sets. The presence of graduates across many industries demonstrates the versatility of the university's programs while highlighting the need for curriculum improvement in sectors such as BPO, consultancy, manufacturing, and healthcare services. There exists considerable opportunity to enhance collaborations with high-employment industries, including retail and finance, to provide internships, training programs, or job placements.

3.5. Major Line of Business of the Respondents Present Employment (HRDM)

This table presents an overview of the industries employing Bachelor of Science in Human Resource Development Management (BSHRDM) graduates from North Eastern Mindanao State University–Tagbina Campus. The data comprises 135 respondents and classifies their occupation according to principal commercial or institutional sectors.

**Table 4**

Major Line of Business of the Respondents Present Employment (HRDM)

Major Line of Business	Frequency	%
Wholesale and Retail Trade including sale and repair of cars, motorcycles, personal and household goods, appliance centers (EMCOR, Desmark, and the like).	31	23
Financial Intermediation (Palawan Express, RD Pawnshop, etc.)	15	11
Private Banks (BDO, Metro Bank, Security Bank, etc.)	10	7
Business Process Outsourcing (BPO)	8	6
Local Government Unit (cities, municipalities, barangay levels)	7	5
Manufacturing	7	5
Agriculture, Hunting, Fisheries, and Forestry	6	4
Cooperative	6	4
Non-teaching Personnel (basic education to tertiary levels) in the government	6	4
Construction	5	4
Pharmaceutical	5	4
Electricity, Gas, and Water Supply	3	2
Manpower	3	2
National Agencies (e.g. DepEd, CHED, DENR, BIR, SSS, DSWD, etc.)	3	2
Real State, Renting and Business Activities	3	2
Armed Forces (PNP, Army, AFP, etc.)	2	2
Hospital/ Rural Health Units in the government	2	2
Mining and Quarrying	2	2
Teaching Position (basic education to tertiary levels) in the government	2	2
Church-Parish Priest	1	1
Logistics / Express Courier / Cargo (LBC, J&S, etc.)	1	1
Manpower Provider	1	1
Non-Government Organization (NGO)	1	1
Non-Life Insurance	1	1
Private Education (non-teaching: basic education to tertiary levels)	1	1
Private Education (teaching personnel: basic education to tertiary levels)	1	1
Private Firms / Company	1	1
Transportation	1	1
Total	135	100

The Wholesale and Retail Trade sector is the predominant field of employment for HRDM graduates, engaging 31 respondents, which constitutes 23% of the total. This indicates that HRDM graduates are in high demand for positions in sales, customer service, and retail operations, where people management and interpersonal skills are

essential. Financial Intermediation (e.g., Palawan Express, RD Pawnshop) accounts for 15 respondents (11%), signifying a notable proportion of graduates employed in finance-related positions, including credit evaluation, client interactions, or human resource activities within these organizations. Private banks, such as BDO, Metrobank, and

Security Bank, employed 10 graduates (7%), indicating that the HRDM program effectively equips graduates for the structured, policy-oriented settings of financial organizations.

*Moderate Representation Business Process Outsourcing (BPO) and Local Government Units* each employ 7–8 graduates (6% and 5%, respectively), indicating the adaptability of HRDM graduates to operate in both private and public sectors, frequently in recruitment, payroll, or employee welfare roles. Manufacturing, Agriculture and Forestry, Cooperatives, and Non-Teaching Government Positions each accounted for 4-5% of graduates. This distribution exemplifies the variety within employment sectors, extending beyond conventional corporate positions.

A significant percentage of graduates is employed in National Agencies (2%), Hospitals, Rural Health Units, and Armed Forces (2% each), indicating their adaptability to positions in public administration, secretarial support, and HR help within government-funded operations. Work in NGOs, mining/quarrying, and church-based positions (1% each) illustrates the diverse work opportunities available to HRDM graduates, encompassing industries that necessitate administrative coordination or human resource management proficiency.

Other sectors, including Transportation, Logistics, Non-Life Insurance, and Private Education (both instructional and non-instructional), each represent 1% individually. The smaller figures indicate that certain HRDM graduates are joining specialized sectors, possibly in specialist HR positions or administrative jobs. The findings underscore the adaptability of HRDM graduates, with employment in both

private and public sectors. The preeminence of the retail and financial industries indicates a trend in which graduates are predominantly engaged in frontline or administrative positions that necessitate strong communication and organizational abilities. The distribution within non-traditional HR sectors such as agriculture, manufacturing, NGOs, and religious institutions indicates that graduates are not only prepared for employment but also adept at applying HR principles in diverse circumstances. While not the primary employer, government employment remains prominent, indicating that the HRDM curriculum prepares students for public service positions.

The employment distribution among HRDM graduates indicates a wide range of industry application, predominantly in retail, finance, and public administration. The data demonstrates the HRDM program's versatility in creating graduates with competencies tailored for various employment settings. This corresponds effectively with the interdisciplinary training offered in the HRDM curriculum, which integrates aspects of management, labor law, recruitment, and organizational growth.

### 3.6. Occupational Classification of the Respondents (BSBA FM)

This table illustrates the job distribution of graduates from the Bachelor of Science in Business Administration majoring in Financial Management (BSBA FM) from the 2011 to 2019 cohort at North Eastern Mindanao State University – Tagbina Campus. A total of 147 participants engaged in the tracer study.

**Table 5**

*Occupational Classification of the Respondents (BSBA FM)*

Occupational Classifications	Frequency	%
Clerical Support Workers	79	54
Technicians and Associate Professionals	19	13
Professional	15	10
Managers	13	9
Service and Sales Workers (such as housekeeper (institutions), caretaker, saleslady/salesman, salesperson in retail or Wholesale establishment, store cashier, promo staff/merchandiser, sales clerk, police officer, security guard, and the like).	9	6
Armed Forces Occupation and Non-gainful Activities, and Special Occupations (such as military personnel, army, navy, and the like).	7	5
Elementary Occupations (such as domestic helper, housemaid, room attendant, vehicle cleaner, and the like).	3	2
Crat and Related Trade Workers	1	1
Plant and Machine Operators	1	1
Total	147	100

This indicates that more than fifty percent of the graduates are engaged in positions that entail administrative and office-related responsibilities. These roles are typically entry-level positions in private enterprises, governmental agencies, or financial institutions, encompassing titles such as office clerks, data encoders, administrative assistants, or accounting clerks. It underscores the significance of BSBA FM training in facilitating corporate operations.

These roles generally necessitate technical expertise and competencies in particular domains such as finance, banking, or business support services. This is good, as it indicates that certain graduates are advancing from clerical positions to more technical or semi-professional employment. This suggests that some graduates secured professions necessitating advanced qualifications or licenses, potentially encompassing roles such as licensed financial analysts, educators, or business consultants.

*Executive Roles Managers constitute 9% (13 responders).* This serves as a favorable sign of upward mobility, indicating that certain graduates have advanced to senior or managerial positions in their firms shortly after graduation. *Service and Sales Industry Service and Sales Workers constitute 6% (9 responders).* These roles generally encompass customer-facing positions, like sales staff, cashiers, or customer support agents. Although these occupations may not exactly correspond with the fundamental competencies of a BSBA FM graduate, they frequently function as transitional positions or pathways to more advanced responsibilities within the business sectors.

*Additional Occupational Categories Armed Forces Occupation, Non-Gainful Activities, and Special Occupations constitute 5% (7 responders).* These encompass military or other distinctive career trajectories, which, although not directly associated with the BSBA FM curriculum, illustrate the varied employment avenues pursued by graduates. *Elementary occupations*, such as domestic servants and cleaners, constitute 2% of the total, represented by 3 respondents. This little number indicates

underemployment or a discrepancy between educational qualifications and job positions, necessitating additional examination. *Craft and Related Trade Workers and Plant and Machine Operators each account for 1% (one respondent each).* These vocations are unrelated to business and may reflect career transitions prompted by economic necessity, personal preference, or insufficient work possibilities corresponding to the degree.

A considerable proportion of BSBA FM graduates are engaged in clerical assistance, suggesting either a robust demand for these positions or a constraint in advancement to more specialized or managerial roles. *Professional Advancement* The existence of alumni in professional and managerial jobs, however limited in quantity, indicates that the BSBA FM program can cultivate graduates who are able to advance into higher-level positions over time. *Concerns Regarding Underemployment* A modest yet significant fraction of graduates are employed in positions that do not necessitate a college degree. This may indicate underemployment or obstacles to accessing more appropriate positions. Hence, enhance career counseling and employment placement services to more effectively link graduate outcomes with their academic disciplines. Establish collaborations with business to offer internships, training, and employment possibilities. Augment curricular and soft skills training to facilitate the transition into professional and managerial roles.

3.7. *Occupational Classification of the Respondents (BSBA HRDM)*

The following table delineates the occupational classifications of 135 graduates from the Bachelor of Science in Business Administration major in Human Resource Development Management (BSBA HRDM) program at North Eastern Mindanao State University-Tagbina Campus, encompassing the years 2011-2019.

**Table 6**

*Occupational Classification of the Respondents (BSBA HRDM)*

Occupational Classification	Frequency	%
Clerical Support Workers	56	41
Professionals	30	22
Technicians and Associate Professionals	19	14
Managers	18	13
Plant and Machine Operators	5	4

Service and Sales Workers (such as housekeeper (institutions), caretaker, saleslady/salesman, salesperson in retail or wholesale establishment, store cashier, promo staff/merchandiser, sales clerk, police officer, security guard, and the like).	5	4
Armed Forces Occupation and Non-gainful Activities, and Special Occupations (such as military personnel, army, navy, and the like).	2	2
Total	135	100

*Administrative Assistance Workers* are the predominant segment of respondents with 41% (56 respondents). This signifies that a considerable proportion of HRDM graduates hold administrative and office-related roles. These generally encompass roles such as human resources assistant, document processing, payroll, and clerical support for HR departments, indicating a direct utilization of their school degree in a professional setting. This strongly suggests that a significant proportion of graduates have attained positions necessitating advanced expertise and potentially licensure or certifications. These may encompass HR specialists, training and development officers, or labor relations officers—positions directly correlated with their area of expertise. These positions may encompass HR assistants, timekeepers, or payroll processors, which frequently serve as support roles for professionals and may act as precursors to advanced HR positions. *Managers constitute 13% of the total, representing 18 respondents.* This signifies that certain alumni have progressed into decision-making or leadership positions within their businesses. It indicates both experience and potential training beyond undergraduate education, suggesting that HRDM graduates possess strong long-term job mobility.

3.8. *Plant and Machine Operators and Service and Sales Workers each constitute 4% (5 respondents each).*

These professions may not be directly associated with HRDM training and could indicate either transient employment or career transitions influenced by existing opportunities. *The participation of Armed Forces and Non-Gainful Activities is negligible at 2% (2 respondents).* This category encompasses those in military service or involved in alternative employment trajectories.

The majority of participants are engaged in occupations pertinent to their studies, especially in clerical and professional human resources roles. This alignment enhances the efficacy of the BSBA HRDM curriculum in equipping students for industry-specific positions. Thirteen percent of graduates occupy managerial positions, indicating that job advancement is attainable within a few years post-graduation. The advancement from clerical to professional and subsequently to managing positions indicates a favorable job trajectory. While the majority of graduates pursue careers in human resources or office environments, a few engage in positions unrelated to their degree, such as machine operation or sales. These instances may signify employment misalignment or external influences such as local labor market requirements.

Augment the internship or practical training elements to more effectively link student competencies with industry requirements. Implement career development seminars or coaching to assist graduates in shifting from clerical positions to professional and managerial responsibilities. Establish collaborations with organizations for entry-level HR roles that offer defined career advancement trajectories.

3.9. *Alignment of the Graduates' Career per CMO 17 series of 2017 (BSBA FM and BSBA HRDM)*

This table displays data regarding the alignment of the careers of 147 graduates from the BSBA major in Financial Management (FM) at North Eastern Mindanao State University – Tagbina Campus with their area of specialization, in accordance with the standards established by CMO 17, series of 2017, which delineates policies and guidelines for business administration programs in the Philippines.

**Table 7**

*Alignment of the Graduates' Career per CMO 17 series of 2017 (BSBA FM)*

Variables	Frequency	%
Breakdown of Jobs not related to Financial Management	75	51
Financial Management related jobs	72	49
Total	147	100
Careers		
Marketing	35	47

Human Resource Management	21	28
Armed Forces	8	11
Social Work	7	9
Overseas Context Work (OCWs)	2	3
Electrician	1	1
Teaching Profession	1	1
Total	75	100

Forty-nine percent (72 graduates) are working in positions pertinent to Financial Management, indicating a direct correlation with their academic preparation. These probably encompass positions such as: Financial officers, Bookkeepers, Accountants, Credit analysts, and Banking and loan officers.

Of the 75 graduates who opted for alternative career trajectories: *Marketing: 47% (35 grads)*

This is the predominant subgroup, indicating that numerous graduates transitioned to positions in product promotion, sales, branding, or market research. This is comprehensible due to the intersection of business training in FM and marketing courses. *Human Resource Management: 28% (21 grads)* A considerable segment shifted to HR positions, likely influenced by elective coursework or employment opportunities. This transition illustrates adaptability and the versatile application of corporate competencies. *Military Service: 11% (8 grads)* Some graduates opted for public service or military jobs, potentially indicating either a personal vocation or insufficient employment prospects in their taught discipline. *Social Work: 9% (seven grads)* This indicates a shift towards service-oriented employment, possibly inside NGOs or community organizations—professions that markedly differ from finance. *Overseas Context Work (OCWs): 3% (2 grads)* Some graduates pursued jobs overseas, presumably due to economic factors or restricted local opportunities. *Electrician and Teaching Profession: 1% each (1 graduate*

*for each profession)* These represent separate transitions, with the electrician presumably having had technical training, and the teacher maybe having obtained accreditation in business education.

The institution should consider strengthening industry collaborations for Financial Management internships and employment opportunities. Career counseling must emphasize a variety of pertinent alternatives for FM graduates, particularly in small or emerging job markets. Incorporate a segment addressing the factors contributing to career misalignment (e.g., employment opportunities, individual preferences, advanced education, etc.). Evaluate if graduates engaged in additional education or certifications that impacted career transitions.

3.10. *Alignment of the Graduates' Career per CMO 17 series of 2017 (BSBA HRDM)*

The objective of the table is to assess the degree to which the careers of BSBA Human Resource Development Management (HRDM) graduates (Batch 2011–2019) from North Eastern Mindanao State University–Tagbina Campus are in accordance with their field of specialization, as per the guidelines of CMO 17, s. 2017. This Commission on Higher Education (CHED) Memorandum Order establishes policies, standards, and recommendations for undergraduate Business Administration programs.

**Table 8**

*Alignment of the Graduates' Career per CMO 17 series of 2017 (BSBA HRDM)*

Variables	Frequency	%
Human Resource Development Management related jobs	69	51
Jobs not related to Human Resource Development Management	66	49
Total	135	100
Careers		
Marketing	30	45
Financial Management	19	29
Operation Management	9	13
Teaching Profession	4	6
Armed Forces	2	3
Health Profession	1	2
Religion	1	2

Just over half (51%) of the graduates engaged in occupations related to Human Resource Development Management. This indicates a moderate degree of congruence between the academic curriculum and employment results. Although the curriculum equips students for HR-related positions, approximately fifty percent of graduates pursue careers in unrelated disciplines, suggesting either vocational adaptability or a disparity between educational preparation and labor market requirements.

The majority of individuals in non-HRDM positions remain within the overarching business and management domain (e.g., marketing, finance, operations), suggesting that the competencies acquired from the HRDM program may be applicable across many business domains. A minor proportion (13%) engaged in professions

beyond the corporate sector (education, military, healthcare, religion), reflecting personal interest transitions or the pursuit of accessible options. The data indicates an equitable distribution of graduates employed in HRDM-related positions and those in alternative sectors. This may indicate: *Labor market conditions*, wherein HRDM-specific positions may be constrained. *Graduate adaptability*, demonstrating their capacity to adjust and utilize their expertise across several domains of business and beyond. *Possible discrepancies in matching the curriculum with evolving industry demands* necessitate additional investigation into the program's relevance to contemporary employment trends.

#### 4. Conclusion

There is key trends in employment outcomes of BSBA graduates majoring in Financial Management and Human Resource Development Management. These trends are part in nation building because people are the best assets in business organizations. This study is in line to the Sustainable Development Goals of the United Nations; stand, as quality education (SDG 4) and decent work and economic growth (SDG 8). In case of Financial Management, 51% work in jobs unrelated to financial management. 47% of these work in unrelated/non-marketing related jobs out of these. In the meantime, 49% of financial management alumni work in jobs directly correlating to the study course. This duality implies a great need for enhancement of career guidance to be more attuned with the industry needs.

With 49 % of the HRDM graduates whose job is not relevant to the human resource management development profession, the skills of these HRDM graduates were also noticed. 46 per cent of marketing jobs have become marketing jobs, up from 33 per cent during working hours. Such high shift could originate as a further development in course design and industry engagement. Addressing these lags, both for Financial Management and HRDM programs, can enhance preparation for relevant career opportunities and employment outcomes more broadly. Furthermore, 69 or 51% are already working, and in the same field.

This employment trend of graduates in Financial Management and Human Resource Development explained through Human Capital Theory and Bandura's Social Cognitive Framework. Knowledge to be educated The Human Capital Theory says that lifelong learning is invested in, providing more motivation to improve your productivity, which will serve in job hunting. In addition, the mismatch between the vast number of graduates working in industries unrelated to their fields of expertise suggests that there is room for improvement, and curricula need to better reflect what is required in the marketplace. Bandura's theory mainly concentrates on personal self-efficacy however highlights the social aspects to make decisions regarding career in the world. Finally, aligning these theories would establish a conducive environment for focusing on the activities that can be put in place, to influence the nature of students in becoming academically relevant, uplift their faith and career perceptions, can gradually move them towards better job opportunities.

#### Acknowledgments

I would like to thank North Eastern Mindanao State University- Tagbina Campus specially the office of Research and Development for funding the conduct of this research. The said materials expenses used in this study is allocated through STF

#### Declaration of Interest

The authors of this article declared no conflict of interest.

#### Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

## Transparency of Data

It is declared unequivocally, along the lines of transparent and open research, that all data and materials used in this study will be shared.

## Funding

The authors of this research really appreciate the help provided by the Research and Development office of the North Eastern Mindanao State University in funding this research. The funding body did not have any role in study design, data collection, analysis, or publication.

## Authors' Contributions

All authors had an equal share of contribution in designing and conducting the methodology, conceptualizing and collecting and analyzing the data, drafting, editing, and finalizing this article.

## References

- Acosta, A. S., Narisma, J. E. B., Belarmino, C. G. A., P. Maragana, T. M., & U. Carino, R. M. A. U. D. T. M. K. (2020). Doing things right: The lived experience of overseas filipino workers having brain drain. *International Journal of New Technology and Research*, 6(1), 16-22. <https://doi.org/10.31871/ijntr.6.1.8>
- Acut, D. P., Curaraton, E. P., Latonio, G. C., & Latonio, R. A. C. (2021). Work immersion performance appraisal and evaluation of grade 12 STEM students in science and technology-based industries.
- Albina, A. C., & Sumagaysay, L. P. (2020). Employability tracer study of information technology education graduates from a state university in the Philippines. *Social Sciences & Humanities Open*, 2(1), 100055. <https://doi.org/10.1016/j.ssaho.2020.100055>
- Austero, J., Armenia, P., & Serifio, M. N. (2012). Employment outcomes of graduates in selected higher educational institutions in eastern Visayas, Philippines. *Annals of Tropical Research*, 34(1), 147-162. <https://doi.org/10.32945/atr3419.2012>
- Bachita, E. B., & Bayoneta, M. J. A. R. (2021). Implementation of public employment services in a Philippine local government unit. *Philippine Social Science Journal*, 4(3), 133-144. <https://doi.org/10.52006/main.v4i3.412>
- Bustos, R. (2024). Bridging the gap: Aligning higher education priorities with the shifting job landscape in the Philippines. *Recoletos Multidisciplinary Research Journal*, 12(1), 9-24. <https://doi.org/10.32871/rmrj2412.01.02>
- Igarashi, T., & Acosta, P. (2022). Who benefits from dual training systems? Evidence from the Philippines. *Philippine Review of Economics*, 59(1), 26-45. <https://doi.org/10.37907/2ERP2202J>
- Kalaw, M. T. B. (2019). Tracer study of Bachelor of Science in Mathematics. *International Journal of Evaluation and Research in Education (IJERE)*, 8(3), 537-548. <https://doi.org/10.11591/ijere.v8i3.17434>
- Khan, M. A. I., & Mojkury, M. A. H. (2021). Curricula and employability: An empirical study on tertiary level students of Bangladesh. *Asian Journal of Education and Social Studies*, 17(2), 1-10. <https://doi.org/10.9734/ajess/2021/v17i230415>
- Kresnawati, E. S., Irmeilyana, I., Amran, A., & Saputra, D. M. (2021). Independence test and plots in correspondence analysis to explore tracer study data. *International Journal of Applied Sciences and Smart Technologies*, 3(2), 241-256. <https://doi.org/10.24071/ijasst.v3i2.3891>
- Mendoza, X. L. D., Pichay, S. B., & Tadeo, J. B. (2023). Utilization of modified SERVQUAL model in crafting strategies among courier services. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(3), 701-712. <https://doi.org/10.11594/ijmaber.04.03.03>
- Mseleku, Z. (2021). Youth high unemployment/unemployability in South Africa: The unemployed graduates' perspectives. *Higher education, skills and work-based learning*, 12(4), 775-790. <https://doi.org/10.1108/heswbl-06-2021-0114>
- Pentang, J. T., Perez, D. R., Cuanan, K. H., Recla, M. B., Dacanay, R. T., Bober, R. M., Dela Cruz, C. E., Egger, S. P., Herrera, R. L., Illescas, C. M., Salmo, J. M., Bucad, J. M. L., Agasa, J. V., & Abaca, N. A. P. Tracer study of teacher education graduates of Western philippines university-Puerto Princesa campus: Basis for curriculum review and revision. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(3), 419-432. <https://doi.org/10.11594/ijmaber.03.03.12>
- Posadas, K. F., Osabel, A. C., Cruz, M. T. A. D., Villafior, M. R. D., Suarez, N. C., Flores, J. T., Mañas, J. L., Yago, C. S., & Adrales, D. D. M. (2021). Employability of teacher education graduates of Nueva Ecija university of science and technology, San Isidro campus. *International Journal Of Applied Research*, 7(6), 15-164. <https://doi.org/10.22271/allresearch.2021.v7.i6c.8650>
- Roman, A. G., & Villanueva, R. U. (2023). Graduate employment rate of one state university of the Calabarzon region in Philippines: A retrospection. *International Journal of Evaluation and Research in Education (IJERE)*, 12(2), 667-674. <https://doi.org/10.11591/ijere.v12i2.24795>
- Sayson, C. J. O., Asilum, W. G., Pintacasi, J. E., Pepania, A. D., & Sumericad Jr, E. H. (2024). Tracer study of bachelor of science in accountancy graduates. *International Journal of Multidisciplinary*, 5(2), 383-397. <https://doi.org/10.11594/ijmaber.05.02.02>
- Toquero, C. M. D., & Ulanday, D. M. P. (2021). University graduates' assessment of the relevance of the curriculum to the labor market in the philippines. *International Research in Education*, 9(1), 19-37. <https://doi.org/10.5296/ire.v9i1.17421>
- Valdez, M. L., Paulo, J. B., Vizcarra, E. M., Torres, A. G., & Chloe, P. (2023). Tracer study of bachelor of science in mathematics graduates: Unveiling career trajectories. *International Journal of Research Publication and Reviews*, 4(11), 2724-2730. <https://doi.org/10.55248/gengpi.4.1123.113142>
- Victoriano, H. T., Posadas, F. C., Migallos, S. F., Reyes, C. S., Campugan, C. E., & Salas, L. F. (2022). Graduate tracer study for the 12 academic programs in the graduate school of San Pedro college, Davao City, Philippines. *Asian Journal of Education and Social Studies*, 35(1), 44-61. <https://doi.org/10.9734/ajess/2022/v35i1747>