



# *Employment situation of the graduates of the headquarters of the Bluefields Indian & Caribbean University (BICU)*

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Submitted on 24 th May, 2023 / Accepted on 06 th September, 2023

<https://doi.org/10.5377/rtu.v12i35.17001>

**Keywords:** Higher education, Graduate, Strategies, Employment situation.

## **ABSTRACT**

**H**igher education, as a service provided by higher education institutions (HEIs), is fundamental for the specialization of knowledge and the development of a country. The theme that is developed in this research is aimed at contextualizing the situation of BICU graduates at the academic level of the regular shift at its headquarters, taking into account four aspects: general data, academic profile, assessment of teaching, and employment situation. The development of the research was carried out according to the qualitative approach, considering the period 2015-2020 and taking into account 190 graduates of 11 careers. The results are presented with recommendations for the follow-up of graduates of the university, such as: creating a graduate monitoring system that allows for structured, continuous, reliable, and detailed information on their academic and work performance and creating an institutional monitoring policy that is executed through an office attached to the Academic Vice-Rector. The most important conclusion is that 63.7% of graduates in the period

2015-2020, of the regular modality, academic level of degree, are working and that 36.3% are unemployed, expressing a fairly positive relationship.

## INTRODUCTION

Bluefields Indian & Caribbean University (BICU) was founded in the city of Bluefields, on June 6, 1991. This educational project aims to train human resources at the undergraduate and technical level, to positively influence the integral development of the communities of the Nicaraguan Caribbean coast and the country. (BICU, 2014)

It stands as an institution that meets the demands of indigenous, Afro-descendant, and mestizo people, which is guaranteed through its four substantial functions: teaching, research, extension, and management. Therefore, to achieve its goals, BICU has the following territorial expressions: Bluefields headquarters, Bilwi nucleus, and extensions in El Rama, Corn Island, Laguna de Perlas, Paiwas, Bonanza, and Waspam. (Bluefields Indian & Caribbean University - BICU, 2021)

BICU in 2019 had an enrollment of 7,754 and in 2020 of 6,373 undergraduate and undergraduate students, in 36 careers offered by the university in its eight campuses. Of this enrollment, 61.37% are female and 38.63% are male. (Mendoza & Flores-Pacheco, 2021) (BICU, 2021)

When students graduate, the institution has the responsibility to follow them up to verify the fulfillment of their goals of human and professional training, which certifies their curricular designs, and educational and training proposals. The graduate is the one who ultimately allows to check if the hypothesis that has sustained the educational and pedagogical proposal is fulfilled satisfactorily. (CNEA, 2019)

This important function has been limited, because, at the BICU headquarters (Bluefields), only three internship and employment fairs have been held (2016, 2017, and 2018) at the project activity level<sup>1</sup>. This reflects the need for the university to define strategies for monitoring graduates and graduates; as well as strategies that ensure their employability according to their professional profile, among which are: job fairs, stock exchange, and career guidance. (Cassell, 2017)

In 2020, Torrez Campos and Obando Pérez conducted a study on the employment situation of graduates of the business administration career of the year 2018 of the Bluefields Indian & Caribbean University (BICU), Bluefields campus. His approach was descriptive and quantitative; They surveyed 22 graduates this time. Among its main results, we highlight: that

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1. **Project:** Innovation Lab: *Innovating to create opportunities and empowerment of young people towards strengthening the protection of children and adolescents*

the average age of the target population was 30 years; 82 percent were female; 73% were working and 75% had an average salary of C\$15,000.

On this occasion, an element to highlight is the lack of private investment in the Southern Caribbean Region, a phenomenon that is related to the employability index. The context of the general crisis of 2018 and the health crisis that began in 2020 are added. These events have had a decisive impact on the fall in productive activity, the outflow of investments, and the disappearance of thousands of formal jobs. (World Bank, 2022) (Ramos, 2020)

This research allows decision-makers in the university to make critical reflections on the relevance and need to improve academic and professional profiles, to maintain an attractive and adequate academic offer for the demand of the higher education service, contributing to the fulfillment of the mission of this university.

The employment situation of graduates of Bluefields Indian & Caribbean University has been studied to validate the correlation between the university's academic offer and the local productive system, taking as a starting point the behavior of the target population in the municipality of Bluefields in the period 2015-2020.

## **METHODOLOGY**

### **Study location area**

The studio is located in the municipality of Bluefields, Autonomous Region of the South Caribbean Coast, specifically in the headquarters of the Bluefields Indian & Caribbean University (BICU). The study is descriptive in that it determines the situation of the variables analyzed, and characterizes the employment situation of graduates of this headquarters in the regular modality. It is also transversal, according to its period and sequence in the analysis of simultaneous variables between 2015 and 2020.

### **Sample and study subjects**

The population is composed of all the graduates of the different careers of the regular modality of BICU in the Bluefields headquarters. In total, there are 11 careers at the undergraduate level, from which 800 graduated and 599 students graduated during the 2015–2020 study period.

**Table 1**

Sample distribution

Race	Modality	Quantity	
		Total	Female
Bachelor of Business Administration	Regular	111	69
Bachelor of Public Accounting and Finance	Regular	109	62
Bachelor of Tourism and Hotel Administration	Regular	102	76
Bachelor of Port and Airport Administration	Regular	45	9
Systems Engineering	Regular	85	19
Doctor of Medicine and Surgery	Regular	89	60
Bachelor of Marine Biology	Regular	20	10
Bachelor of Environmental Sciences	Regular	35	17
Bachelor of Ecology with mention in sustainable management of natural resources and biodiversity	Regular	45	30
Ing. Civil	Regular	109	18
Bachelor of Education Sciences with mention in English	Regular	50	28
Total		800	398

**Type of sample and sampling**

Non-probabilistic-intentional sampling was applied, since, in the absence of rigorous monitoring of the university, there is no updated information to contact graduates and graduates; In addition, because it is a retrospective study, the information generated by the study population, at the time of enrollment, may have changed. (Garcia-Perez, 2005)

Taking into consideration the aforementioned background, the decision is made to choose a sample equal to 190 graduates and graduates, in such a way that it can be representative and easily accessible for the study. To access the data of graduates and graduates, the data provided by the Academic Registry Directorate of the Bluefields headquarters was used as a reference; Also, to complete the required information, the faculties and schools that provided data of some of their students were visited: telephone number and addresses. (Guevara et al., 2020) (BICU, 2022)

## **Research technique and instrument**

The approach with the graduates and graduates has used the means of contact provided by the faculties and schools. For this, a team of three technicians (graduates of different BICU careers) was formed to support the information collection process.

The instrument used was the survey to obtain primary information, which was structured in four sections: general data, academic profile, assessment of teaching in the HEI studied, and employment situation. The questions were closed of dichotomous types, multiple choice, and rating scale, which allowed: to collection of quantitative data and application of the instrument in the shortest possible time; With these types of questions, respondents tend to respond more promptly.

## **Statistical data processing**

The results of the surveys were analyzed using the statistical program IBM SPSS Statistics version 27 and Microsoft® Excel. The study was structured in two phases: the first included the collection of secondary information based on previous studies and reports, which allowed the bases for the construction of an accurate description of the local productive system; the second and complementary one, included the documentation of the results of the implementation of the research instrument, carrying out fieldwork for data collection. (IBM, 2020)

## **RESULTS**

### **The employment situation of BICU graduates in the five years 2015–2020**

The headquarters of the BICU University in the city of Bluefields registers the largest number of student population and workers between administrative and teachers. From this, the academic and administrative processes of the extensions located in the South Caribbean Region (El Rama, Laguna de Perlas, Corn Island, and Paiwas) are managed.

This headquarters specializes in careers related to the areas of education, social sciences, administrative sciences, construction engineering, and health. Most of its students are located in the regular modality and have an initial enrollment of 1,867 students in 2020.

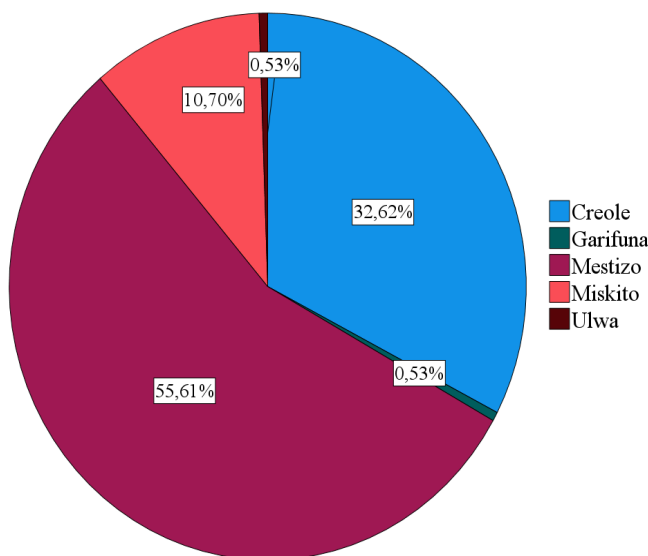
BICU, in its organizational structure, lacks offices dedicated to the follow-up of graduates and graduates; however, in its strategic plans for the period 2014-2018 and 2019-2023, it outlines the elaboration of work policy with this segment of professionals, through the creation of the association of former students of the BICU in each extension, with perspectives of holding the congress of graduates of this Alma Mater.

From the data provided by the respondents, it was determined that 55.3% of the surveyed population is female. The middle age segment is between 21 and 29 years, equivalent to 70.5%,

characteristic of the modality of regular studies where those who enroll in their majority, are high school graduates new to university.

This type of study takes place from Monday to Friday in the day, evening, and night shifts. BICU is a community and intercultural university, therefore, in its enrollment, there is an ethnic diversity, as evidenced in this study: 55.61% of the respondents are of the mestizo ethnic group, followed by Creole with 32.62%, Miskito with 10.70%, Ulwa with 0.53% and Garifuna with 0.53% (Fig. 1).

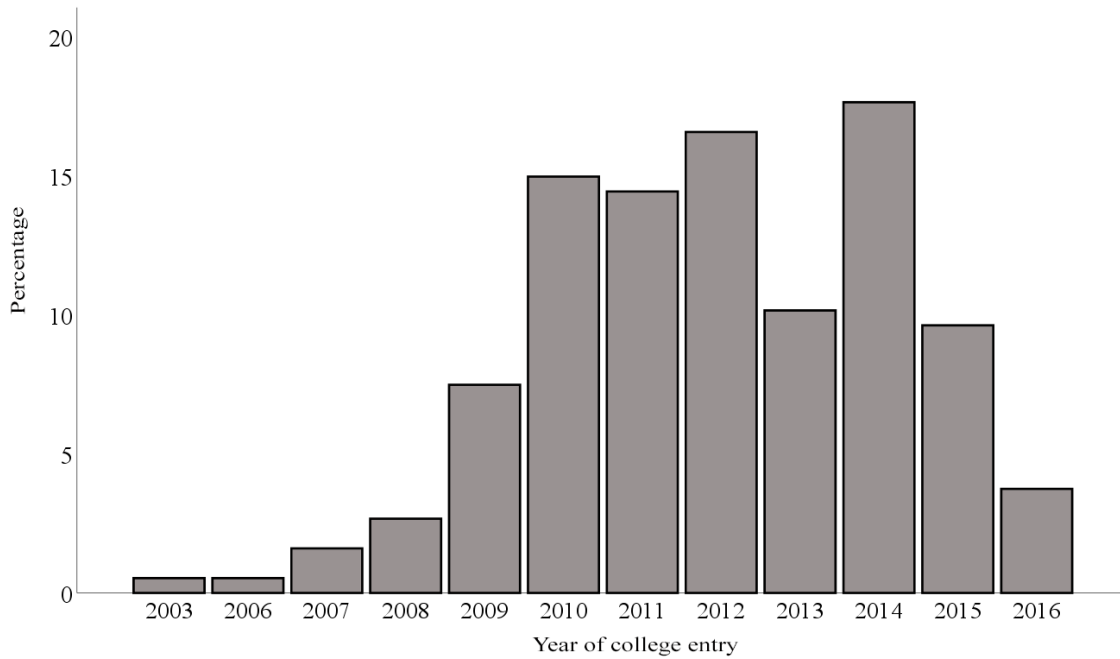
**Figure 1**  
Distribution by ethnic identity of respondents



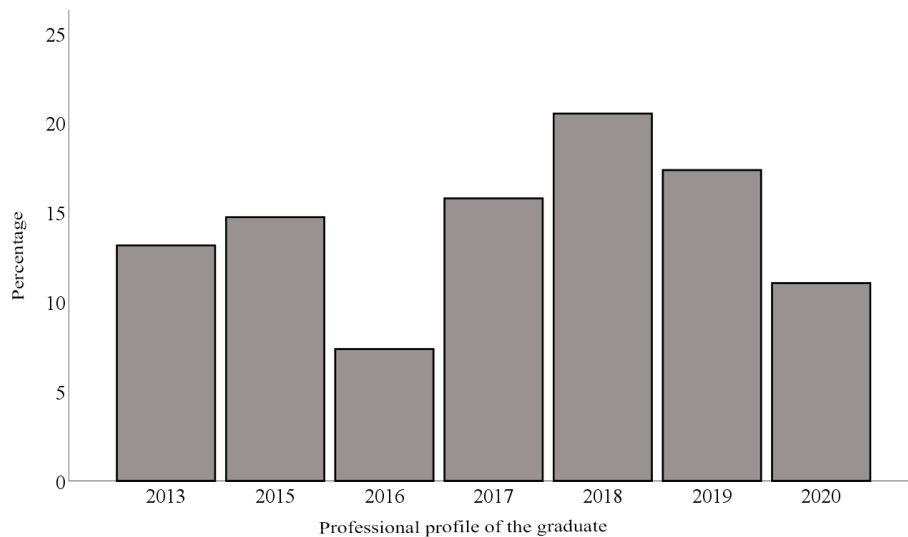
**Academic Profile**

The academic profile corresponds to the triangulation of the variables of the year of university admission, the career studied by the young person, and their status as a graduate and/or graduate. 18.42% of respondents entered college in 2014, followed by 15.79% who entered in 2012 and 15.26% in 2011. Similarly, they were consulted about the year in which they obtained their status as graduates, the results are as follows: 23.16% in 2020, 21.05% in 2019, and 18.95% in 2018. Based on this information, it is estimated that BICU students invest an average of six years to complete their higher education (Figure 2).

**Figure 2**  
Year of college entry



**Figure 3**  
Professional profile of the graduate

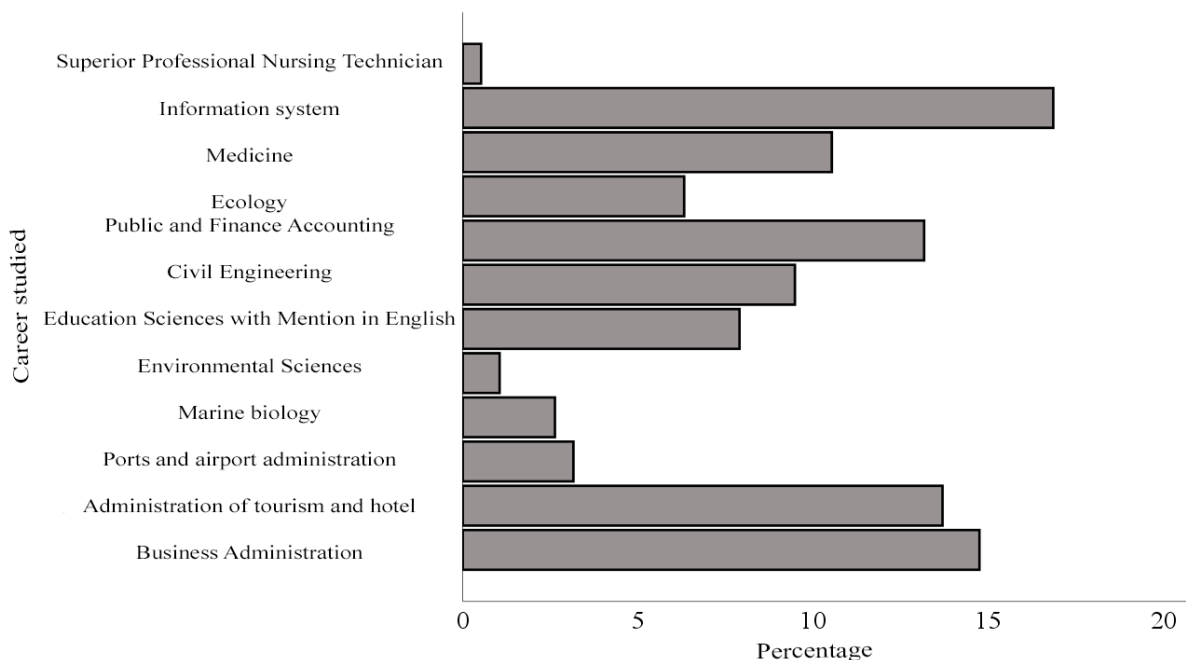


Regarding the professional profile, the study determined that 78% are graduates, that is, young people who have completed the completion form of their respective careers and who have a university degree (Figure 3). According to the career studied, 16.8% of respondents are from the Systems Engineering career, 15.26% from Business Administration, 13.68% from Tourism and Hotel Administration, and 13.16% from Public Accounting and Finance. The cause of the

variability in the number of people contacted was that they were careers for which the academic unit had updated contact information (Figure 4).

**Figure 4**

Participation according to the race



**Assessment of teaching at BICU**

According to Jaramillo (2013), *the graduate is a thinking and deliberative subject who issues assessments about satisfaction with the training received and the institution. These appreciations are reflected in society and the quality of the program that is titled it.* In this sense, section number three of the applied instrument was aimed at knowing the student’s perception of the methodological strategies used by teachers during their training process and the relevance of the curriculum.

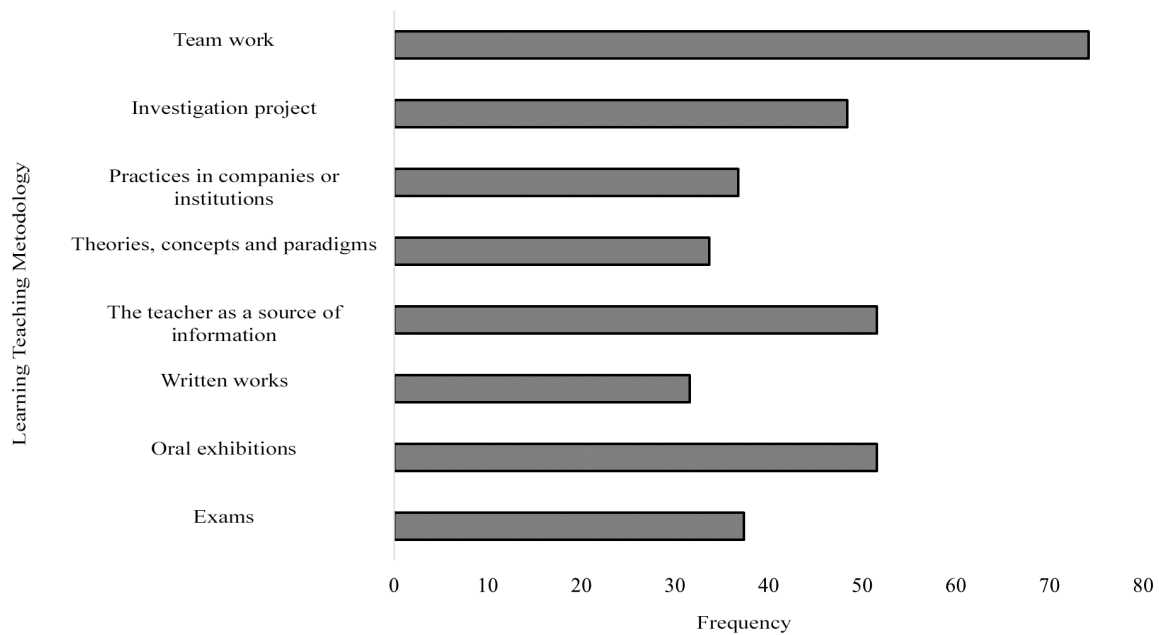
In the Self-Verification Report 2015-2020 of BICU, item 3.3 results obligation three, it establishes that the institution implements programs in the undergraduate and undergraduate modalities under the curricular model by objective. The curricula are appropriate to the aforementioned modalities. These contain the minimum generic elements established in the institutional curricular regulations. However, despite the above provision, the teacher has the flexibility to adjust his methodology according to the needs of the learners.

Also, the study asked about the relevance of teaching-learning methodologies in the training process. 74.2% responded that the group work strategy was the most timely in their training process, followed by the teacher as a source of information and oral presentations with 51.6%, respectively. In addition, 48.4% indicated that the research projects were adequate strategies (Figure 5).



**Figure 5**

Teaching-learning methodologies



These teaching and learning methods were the most used by BICU teachers. However, 36.8% expressed their dissatisfaction because the practical strategy in *companies or institutions* was not used as a teaching and learning method in their career.

In BICU, the fulfillment and quality of the work of the student practitioners are regulated by specific regulations, understood as professional practices, the execution of facts or exercises of the student, which will serve to test or verify the technical knowledge acquired. They are a substantial part of the curriculum, are based on previous theoretical knowledge, and aim to link the student inter and multidisciplinary with their future field of work or service. The regulations indicate the modalities in which the student can carry out the practices, establishing as follows:

**a) Intra-institutional:** This modality belongs to the professional practices that are carried out under the direction and supervision of the corresponding school or faculty. These can be:

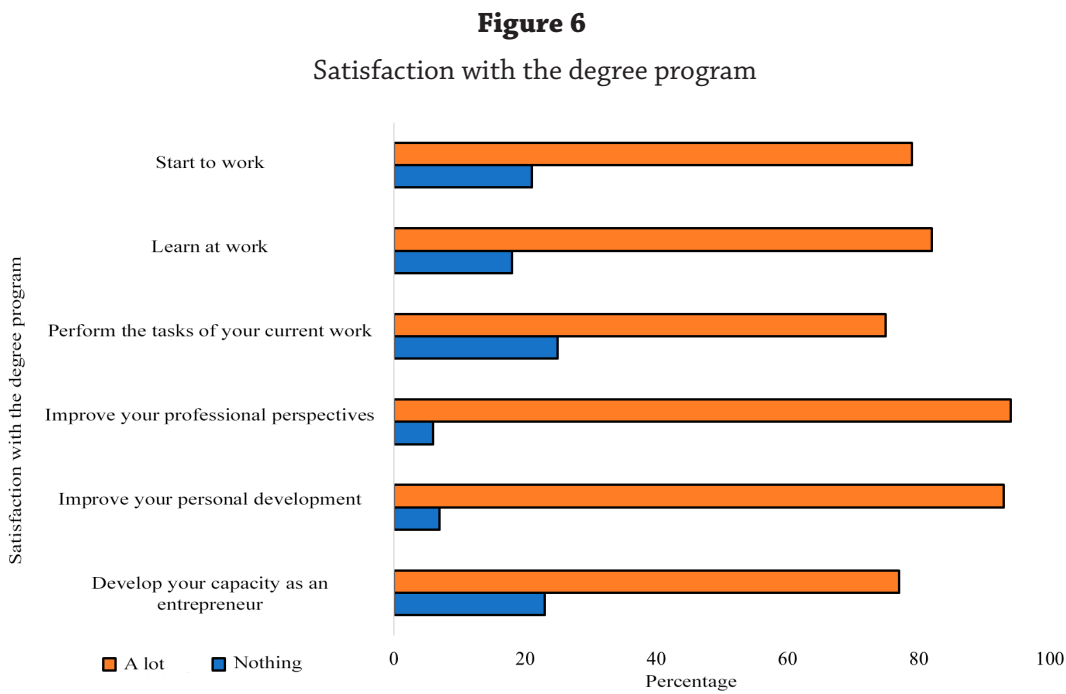
- Professional practices such as participation in a research project.
- Professional practices as rotation in the different structures of the university.
- Professional practices through the formulation and execution of an entrepreneurship project.
- Professional practices as a student assistant.

**b) Extra-institutional:** also known as internships, are the activities carried out in public or private organizations, non-governmental organizations (NGOs), territorial and communal outside the university. These will be carried out under the supervision of the aforementioned entities in coordination with the corresponding school or faculty. They will be governed by an agreement, agreement, or contract for the provision of teaching services\learning, signed between the university and the respective company or institution. The regulations establish that the duration of working hours as professional practices must be agreed between the company or institution and the student practitioner, with a minimum of 160 hours.

Regarding the duration of the professional practices, the graduates surveyed have divergent opinions: 51.3% consider that 160 hours are not enough to develop their knowledge and skills in the company that corresponded to carrying out their internship.

To know the perception of satisfaction with the career program, the instrument applied presented a list of six aspects: start working, learn on the job, perform the areas of your current job, improve your professional prospects, improve your personal development, and develop your capacity as an entrepreneur.

The results indicate that graduates consider the curriculum taught by BICU to be relevant because it allows them to function in the world of work and improve their standard of living, which influences satisfaction with the degree program studied and with the image that this projects toward society (Figure 6).

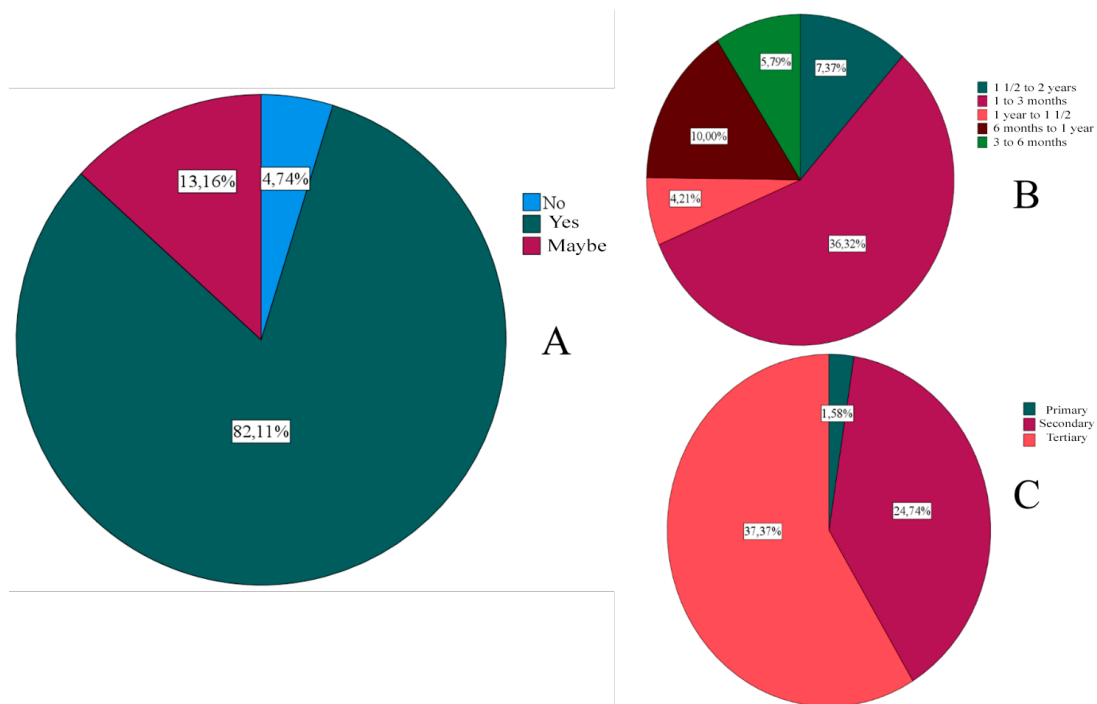


The aspect named *Assessment of Teaching*, concluded with a question related to the general satisfaction of the students to return to study at the BICU. The literature mentions that the satisfaction of a customer concerning a good or service is a key aspect of quality management within an organization, its measurement allows an effective alternative for improving performance. (Domelis, 2009). In this sense, 82% are satisfied when they express that they would return to study another career or specialization in this institution; 13.2% say they would consider it.

Undoubtedly, this house of higher studies must measure at a more explicit level the satisfaction of its students, so that it allows collecting information for curricular reforms, and designing postgraduate courses and specialization, all duly articulated with the national requirements that determine the educational quality in coherence with the educational project.

**Figure 7**

A) Assessment of studying another career or a specialty in BICU - B) Time elapsed for the first job - C) Economic sector where you work.



**Employment status**

This section of the applied instrument allowed us to know the current employment situation of BICU graduates (Figure 7A). The results reveal that in the period 2015-2020 of the regular modality, academic level of degree, 63.7% are working; 57 percent, after completing their degree, got their first job within 1 to 3 months; 59% are located in the tertiary sector of the municipal economy.

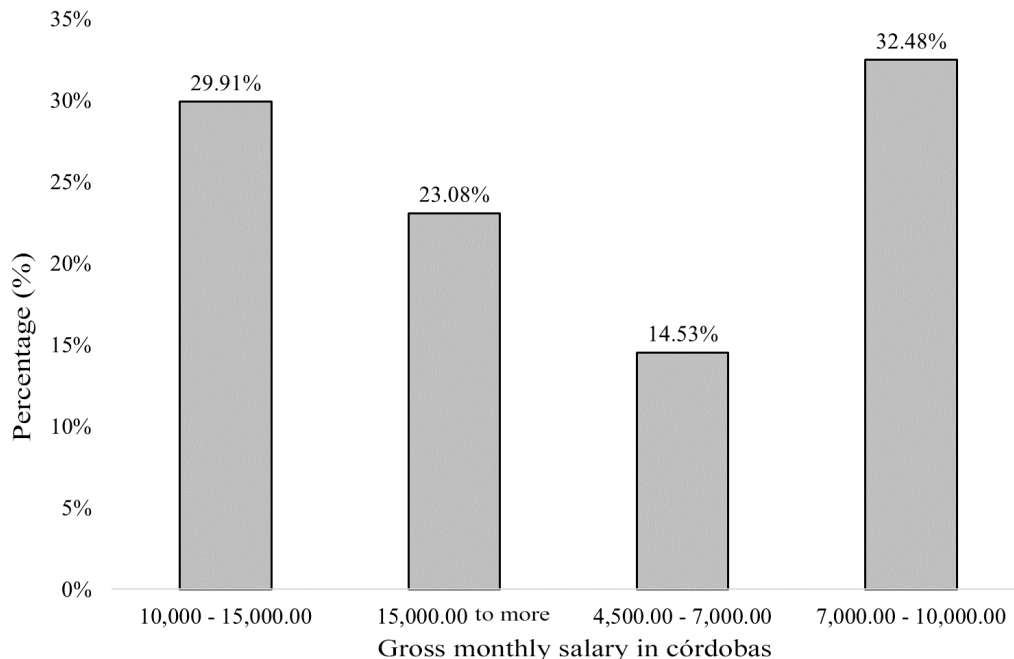
Regarding the entity where they work (Fig. 7B – 7C), 53% is located in the public sector, confirming the affirmation of the 2030 Human Development Plan, which says: *Within the population of wage earners, the government covers the largest part, being one of the main sources of formal employment in the region*, due to the presence of different entities of the central government: Ministry of Education (MINED), Ministry of Health (MINSA), Ministry of the Family (MIFAM), Ministry of the Interior (MINGOB), Nicaraguan Fisheries Institute (INPESCA), Ministry of Labour (MITRAB), Ministry of Natural Resources (MARENA), among others. In addition, there are the autonomous entities Autonomous Regional Council of the South Caribbean Coast and the Regional Government of the South Caribbean Coast.

48% of BICU graduates have an indefinite contractual relationship, that is, no time limits are established in the provision of services, which may be held full-time, part-time, or provision of discontinuous fixed services.

41% of respondents held positions of medium responsibility and 40% of high responsibility. As for the gross monthly salary in córdobas, 53% is higher than 10,000.00 córdobas and 47% receive between 10,000.00 to 4,500.00 córdobas.

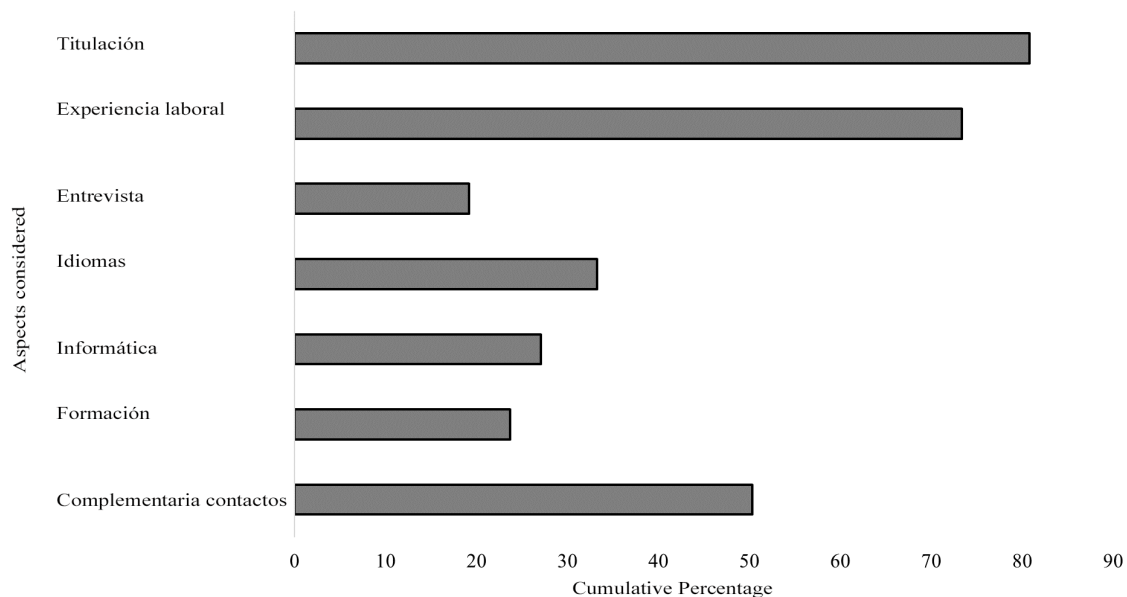
**Figure 8**

Gross monthly salary in córdobas



Regarding the degree of satisfaction with the current job, 76% consider that their work is in line with their area of study; 72.35% are satisfied and 19% indicate maybe. Based on their work experiences, respondents mentioned 3 aspects that they consider influential for obtaining a job: university degree (80.8%), work experience (73.4%), and contacts (50.3%).

**Figure 9**  
Influential aspects to obtain a job.



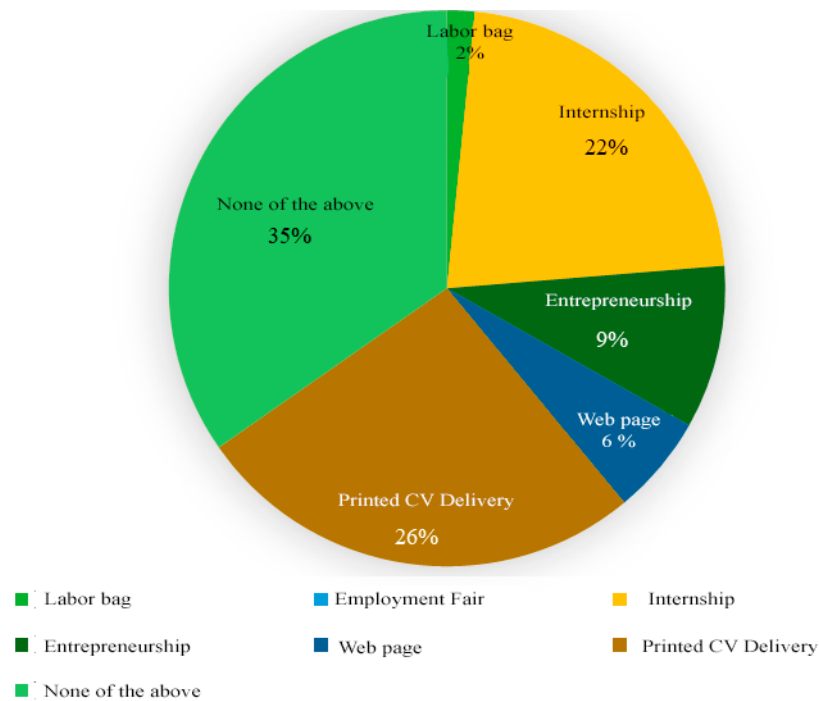
The study allowed us to know the opinion of the 36.3% who are not employed, about the cause of their employment situation (Figure 9). The following results were obtained: 39.1% consider that they are unemployed due to little work experience, which is representative of the structural situation of the country.

In the FUNIDES 2013 survey, it revealed that the main reason why human resources managers of almost one hundred national companies had problems hiring young people under 25 years of age, is that *Applicants lack the skills they require*. The lack of skills not only hinders the integration of young people into the labor market but also increases the costs of companies when teaching, so that they perform well in their position. (Cajina, 2020)

26.6% of graduates say that of those who are unemployed (34.7%) do not use strategy; 26.3% visit companies and institutions and deliver their printed *curriculum vitae*, they wait to be called at some point; 22.1% visit the places where they did their internships or have remained working at the end of their professional practices. 9.5% use the entrepreneurship strategy.

**Figure 10**

## Job placement strategies



89.5% of respondents raise the need for a policy of monitoring university graduates and 95.3% consider a follow-up office (Figure 10), which allows collaboration with the labor insertion of young people, which trains them to develop skills and have more advantages in the labor market.

Graduates of higher education institutions (HEIs) with the ability to be hired and stay in employment, is one of the most pressing global issues of institutions. Monitoring job performance and the insertion of graduates into labor markets is an issue institutionalized by universities and governments. However, the employability of university graduates is not only explained by educational policies and/or the efforts of universities, it also influences the situation of the country's labor markets: rigidity (regulation) or flexibility, frictional unemployment level, economic cycle, the precariousness of youth employment, the informality of the economy. (Sánchez, 2018)

Also other elements: choice of career, divergence between the skills offered by graduates and the demand of employers, level of development of generic skills of graduates, size and level of innovation of companies, among others.

In Nicaragua, since 2018, due to the economic recession that caused notable limitations in the national labor market, one of the most affected groups has been young people, whose access to a job, added to other factors, has been more difficult for them. (Cajina, 2020)

In an interview with Álvaro López Espinoza, coordinator of the quantitative analysis area of the Nicaraguan Foundation for Economic and Social Development (FUNIDES), he emphasizes that one of the limitations for young people to access a job is the lack of experience. This not only hinders the integration of young people into the labor market but also increases costs for companies, because when integrating them you have to retrain them so that they can perform successfully in the positions they would be occupying. (Cajina, 2020).

## CONCLUSIONS

63.69% of BICU graduates are employed in positions of medium and high responsibility. Of these, 53% earn a minimum wage not exceeding C\$ 10,000.00.

Graduates consider that the curriculum taught by BICU is relevant because it allows them to function in the world of work and improve their standard of living. This positive effect generates satisfaction concerning the degree program studied and strengthens the institutional image and social prestige.

However, the university must take into account the follow-up of graduates, as a guarantee of academic quality conditions. Consequently, the development of short- and long-term strategies must materialize as an institutional policy aimed at alumni.

The study shows that the main cause of unemployment in young graduates is little work experience, which is an important requirement to get a job. In that sense, the academy must rethink the way of teaching in the analysis and resolution of problems, not only in higher education.

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