

# Teacher management and job satisfaction: Analysis of the proposal of the accreditation model for Peruvian university higher education programs

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## Abstract

This research takes as a parameter the standards of factor 5 of the accreditation model of university higher education study programs to establish the level of satisfaction and the relationship between teacher management and job satisfaction. This is a quantitative, applied, descriptive-correlational study. A documentary review guide and two questionnaires administered to 120 teachers of a business science faculty were used. The documentary review shows that 86% are satisfied with the training; before the pandemic, 90% of them were face-to-face; 84% have access to the hiring process; 53% have a master's degree and 47% have a doctorate. The descriptive analysis shows that management is perceived at a high level of 83.9% and satisfaction at 92.9%. The inferential analysis indicates that there is a high correlation of .715 between the variables and a moderate correlation between teacher selection, evaluation, training, and improvement at .672; recognition of their activity at .647, and academic development plan at .686. The authors propose that the study programs should install an evaluative culture that allows them to periodically review their processes for continuous improvement, which will reach 100% compliance. The study results allow concluding that efficient management will guarantee job satisfaction as an institutional strength.

**Keywords :** teacher management; job satisfaction; accreditation; quality standards; curriculum.

## I. INTRODUCTION

Accreditation has accentuated the interest of universities to install elementary elements of quality in their environment (Mayta, 2018), demanding that their educational programs comply with the guidelines given by the accreditation processes (Márquez and Zeballos, 2017).

However, there is a gap between the established standards and the educational practice and the tension that exists in its environment is due to the resistance to change of its members (Cano et al., 2017). If the institution must change and occupy a preponderant seat, it is essential to strengthening the bonds of union

and cooperative work among the staff (Barona and Castro, 1999).

This leads to focus on the capacity of institutional educational management and teacher management, understanding that to manage is not only to involve the members in the achievement of the goals proposed by the organization, but also to seek to overcome them (Guzman, 2001), promoting better academic results and an environment whose members feel identified with the institution and recognized for their work (Rodríguez, 2014), either in a didactic, cultural, scientific or educational context of didactic strategies (Salguero, 2008).

Therefore, it is required that this manager meets certain characteristics like having a

holistic view of the training provided, and an effective leader in decision-making, enabling new methodological proposals, and effectively leading to professional training (Méndez, 2018).

Job satisfaction is the affection that the worker may feel for the work context in which he/she is and has a transcendental scope in the organizational process, (Caballero, cited in Montoya et al., 2016). It will change in the worker a response of conformity or nonconformity that will be embodied in attitudes assumed at work (Duche et al., 2019) and these will be positive if the worker feels satisfied with what he/she does (Alvarado, 2020).

Considering the above, those who are motivated and identified with the management can perform educational work that includes their maximum effort (Gutiérrez, 2020). This research seeks to answer questions related to these two constructs that allow sustaining the management of teachers and job satisfaction from the application of the standards of Factor 5 proposed by SINEACE (2017) in the accreditation model for Peruvian university higher education programs. The execution of the study will be carried out through two processes: the first one, the application of a documentary review guide, and the second one, regression analysis to determine the level of correlation between the variables and dimensions of the study.

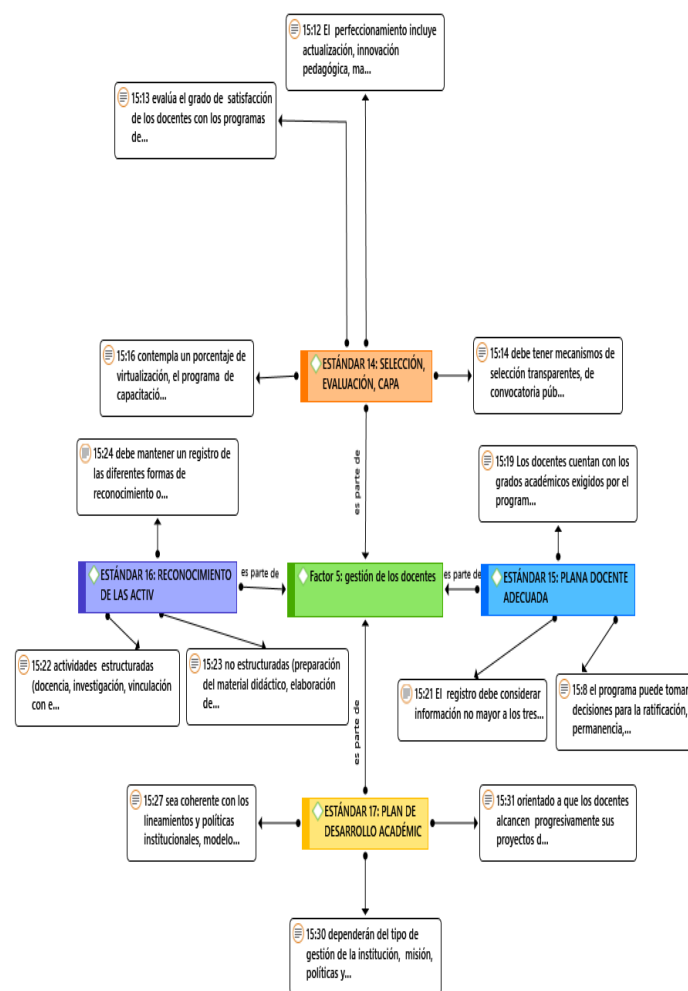
## 2. Theoretical framework

The starting point of the research is the review of the accreditation model of university higher education study programs, which made it possible to analyze the standards with a holistic vision and, within the four dimensions that comprise it. Dimension 1: Strategic management (Factor 1, 2 and 3, standards 1-8); dimension 2: Comprehensive training (Factor 4,5,6,7,8; standards 9-26); dimension 3: Institutional support (Factor 9, 10 and 11; standards 27-32) and dimension 4: Results (Factor 12; standards 33-34).

The study focuses on Factor 5, which guides the management of teachers through standards 14, 15, 16, and 17, which it calls: selection, evaluation, training, and improvement of teachers; adequate teaching plan; recognition of teaching activity and academic development plan for teachers. Figure 1 processed through the

network of codes and citations of Atlas ti will allow obtaining the basic points of the model proposed by SINEACE (2017) and we will join it with the support of other research or current regulations.

Figure 1. Factor 5: Management of teachers



Source: Adapted from information from Factor 5, SINEACE (2018).

Standard 14 organizes the criteria to be evaluated for teacher selection, evaluation, training, and development. The first of these, selection, is conceived by Chavenato (cited in Gouveia and Montiel, 2006) as the process that makes it possible to choose the most suitable candidate for the position. This must be carried out through a public competition establishing the conditions and merits that ensure academic and intellectual competencies (Law No. 30220, 2014). Aspects that are contemplated in this standard, as well as the establishment of the profiles of the position required and executed by the corresponding area, following the provisions of the State and institutional regulations that

guarantee a transparent and fair process (SINEACE, 2018).

If programs require continuous improvement as part of their institutional strategic objectives, it is essential to consider the second aspect, the evaluation of teachers (Jara and Diaz, 2016). This includes, according to Lukas and Santiago (cited in Aznar et al., 2017), evaluative judgments that allow measuring the achievement of the proposed objectives and must follow 3 processes: the diagnosis, which allows identifying needs for the development of a training plan that allows the improvement of teaching competencies, the analysis of this training plan and the verification, monitoring and evaluation. This information may be used during the other processes: ratification, permanence, promotion, or separation of the teacher (SINEACE, 2018).

Finally, teacher training is conceived, according to Frenay et al. (cited in Andrade et al., 2020), as any activity that has as its axis to improve pedagogical processes by strengthening the teaching and learning capacities of the teacher. This should be permanent and is born from a diagnosis that allows training in aspects that require improvement; considering not only face-to-face training but virtualization mechanisms, since current contexts require greater access to e-learning processes, the fusion of digital content, applications, and processes based on learning in virtual environments, also including processes of teacher improvement in their disciplinary field or research skills (SINEACE, 2018).

Standard 15 refers to an adequate teaching staff, which must be suitable, not only in quality but also in quantity. Because of this, the curriculum must have several teachers that will allow it to comply with the plan, and who must be professionally qualified, in addition to a commitment to include in their actions the institutional values and conduct following professional ethics. The importance of establishing in the selection, the required teacher profile, and the permanent updating of a record of their professional trajectory is highlighted (SINEACE, 2018).

Therefore, teacher training in universities constitutes a fundamental aspect (UNESCO, 1998) and Jopen et al. (2014) point out three fundamental aspects: the first, focused on their initial training; the second, focused on

permanent and continuous training, and the third, based on experience and surrounding socioeconomic factors. Likewise, authors such as Beltrán and Seinfeld (2011) and Harbison and Hanushek (1994) affirm that these constitute central factors of the educational offer, given that their specific characteristics influence their pedagogical practice and the performance of their students.

Standard 16 focuses its evaluation on the recognition of teaching activities. This should cover both structured and unstructured activities and would not only consist of economic incentives but also in the support of mobilities, participation in national and international events, preparation of educational material, interventions in consultancies, or others that show their commitment to the institution (SINEACE, 2018). These actions not only promote employee satisfaction but also the appropriate environment to achieve the notoriety of the institution (Puentes, 2017), since it will allow them to strengthen their academic training with postgraduate studies, enjoy recognition and funds granted for research that can be used to enhance their competence in this field (Law No. 30220, 2014).

Standard 17 is oriented to the academic development plan, a document that regulates institutional activities to strengthen and improve teachers (SINEACE, 2017) since it allows connecting teaching activities with all areas of intervention, through strategies that guide and ensure the standards of the proposed model (Barrera et al., 2014). Its guidelines include indicators that evaluate compliance, control, and monitoring of progress until the expected results are reached; therefore, it is important to record their academic training, work experience, and progress in scientific teaching production, either through publications in indexed journals, books of their authorship, dissemination of their results through national and international papers, book chapters or patents. This plan should be considered as an institutional life project that agrees with the current regulations, educational model, and purposes of the program of study (SINEACE, 2018).

On the other hand, the other variable, job satisfaction, as a positive attitude of a worker on which depends the results of their work (Barraza and Ortega (cited in Dipp and Gutierrez, 2010) and whose understanding requires a holistic

exploration that allows addressing the following needs: physiological, security, affection, love and belonging, esteem, and self-actualization (Maslow, 2017), corresponding to a need for achievement, proposed by McClelland, which leads personnel to feel fulfilled and moves their actions to cooperative relationships (Santivañez, 2017).

In this research, based on the review of the standards related to the management of teachers of the accreditation model of university higher education programs, the study proceeds to a documentary analysis of the regulations, reports, and records of the teaching staff to then proceed to determine how these standards are related to job satisfaction.

### 3. Methodology

#### 3.1. Objective, design, and participants

The purpose of this study is carried out in stages: the first; the analysis of factor 5, teacher management, proposed in the accreditation model for university higher education study programs (SINEACE, 2017); the second, sought to analyze its applicability in the field of study through documentary review: regulations, directives, reports, and records that regulate teaching activities; finally, the determination of the relationship between teacher management, its dimensions and job satisfaction. To this end, certain questions were formulated:

- What is the evaluative proposal for teacher management of the model for university higher education curricula?
- How do regulations or documents regulate the management of teachers in the institution?
- What is the level of satisfaction with the teachers' management?
- How are teacher selection, evaluation, training, development, and job satisfaction related?
- To what extent does an adequate teaching staff have an impact on job satisfaction?
- How does the Academic Development Plan relate to job satisfaction?

- To what extent is recognition of teaching work activities related to job satisfaction?

The research is applied because it starts from the use of previous knowledge to achieve others as a result of this study (Soto, 2014) and the design is a non-experimental, cross-sectional type of descriptive correlational scope because it aims to specify the correspondence between variables starting from its characterization (Hernandez et al., 2014). The study involved the participation of 120 teachers, and the sampling used was based on knowledge and under the researcher's criteria, corresponding to a non-probabilistic sample (Hernández et al., 2014). Likewise, when observing the number of teachers, the suggestion of Horna (2015) was followed, who points out that in the case of a small and accessible population the study should be carried out considering all subjects.

#### 3.2. Instrument

A document review guide was prepared to allow organizing information on regulations, directives, and reports related to how teacher-related activities were managed. Also, two questionnaires were constructed: one of them focused on teacher management and the other on job satisfaction. Both were composed of 20 items and 4 dimensions: selection, evaluation, training, and improvement, adequate teaching staff, recognition of teaching activity and academic development plan, and developing a set of questions that allowed quantifying them (Behar, 2008).

The Likert scale was used allowing these items to measure the reactions of the study subjects through options ranging from one extreme to the other, and to discover different scales of opinion (Flores, 2014). It was added to job satisfaction, the dimension of infrastructure and resources. These instruments have in their construction the proposal and adaptation of the guidelines of the SINEACE (2017) and SINEACE (2018) models. The validity of the instrument was carried out using expert judgment; conformed by professionals knowledgeable on the subject, their profile being educators or professionals with experience in accreditation processes. The validation was carried out under indicators that evaluated the clarity, objectivity, timeliness, organization, sufficiency, intentionality, consistency, coherence, methodology, and relevance of each

of the formulated items. In the end, their applicability was considered.

When Cronbach's alpha was applied, it resulted in very high reliability, with a score of .941 for the Management of teacher's instrument and .916 for job satisfaction.

Table 1. *Reliability by the internal consistency of the items of instrument 1*

| Management of teachers   | Cronbach's alpha |
|--|------------------|
| The syllabus:  |                  |
| Executes a public, fair and transparent call for applications for the selection of teaching staff.                                     | .913             |
| Establishes the job profile in the selection of the teaching staff.  | .918             |
| Establishes regulations, mechanisms, and criteria for the evaluation of teaching performance.  | .909             |
| Strengthens teaching competencies in the disciplinary area and/or research.  | .915             |
| Evaluates the degree of satisfaction of teachers with training or improvement programs.  | .916             |
| Include a percentage of virtualization in the training or improvement.   | .913             |
| It orients the teaching management to the statutes, regulations, norms, and directives.  | .911             |
| Establishes the duties and rights of teachers in the statute, regulations, rules, and directives.                                      | .907             |
| It has teachers who meet the academic degrees required by law.   | .908             |
| It has qualified teachers who ensure the achievement of the students' graduation profile.  | .910             |
| It guarantees a teaching staff with methodological and didactic qualifications.  | .911             |
| It has a teaching staff with ethical and personal qualifications.  | .911             |
| It has a record of the teaching staff that contains: professional training, experience, publications, updates, and/or specializations. | .912             |
| Recognizes the activities carried out by the teaching staff in their academic work, research, responsibility, or tutoring.             | .908             |
| Recognizes teaching work through economic or academic incentives.  | .910             |
| Recognizes the unstructured activities of teachers: preparation of didactic material, preparation of exams, or student counseling.     | .912             |
| It has an academic-professional development plan.  | .913             |

|  |      |
|--|------|
| Monitor the progress and achievements of the academic-professional development plan.                                 | .917 |
| Plans and finances the participation of teachers in international congresses, books, articles, or academic mobility. | .914 |
| Plans and executes the process for the ratification, tenure, promotion, or dismissal of teaching personnel.          | .911 |

Source: Adapted from SINEACE (2018)

Table 2. *Internal consistency reliability of the items of the instrument 2*

| Job satisfaction  | Cronbach's alpha |
|---|------------------|
| At what level do you feel satisfied with:   |                  |
| The selection process of the teaching staff.  | .913             |
| Teacher performance evaluation.   | .918             |
| Teacher training/professional development programs.                                   | .909             |
| The rules that guide the teaching management: Bylaws, Regulations, Directives...      | .915             |
| Methodological and didactic qualifications of the program's teachers.                 | .916             |
| The academic qualifications of the program's teachers.                                | .913             |
| The ethical and personal qualifications of the program's faculty.                     | .911             |
| Recognition of their academic work.   | .907             |
| Recognition in its research work  | .908             |
| Monitoring of the academic-professional development plan.                             | .910             |
| Academic teacher mobility.  | .911             |
| Advice and financing for the publication of scientific articles.                      | .911             |
| The process for teacher appointment.  | .912             |
| The process for teacher ratification.   | .908             |
| The process for teacher tenure.   | .910             |
| The process for teacher promotion.  | .912             |
| Technological support: Platform, Sivireno, virtual classrooms, consultancies.         | .913             |
| Adequate infrastructure for the development of the teaching process.                  | .917             |
| Information sources, databases, and bibliographic collections to meet teaching needs. | .914             |
| In general, in the motivation to carry out their teaching work.                       | .911             |

Source: Adapted from SINEACE (2018).

Tables 1 and 2 show Cronbach's alpha by items and dimensions, reaching high reliability in each of them, which allowed attention to the applicability of the instruments used.

#### 4. Results and discussion

##### 4.1. Regulations governing teacher management

The following documents were reviewed: Statute, General Regulations, Teacher Appointment Regulations, Teacher Hiring Regulations, Teacher Training Regulations, MOF Organization, and Functions Manual, Teacher Training Plan, reports, and teacher record forms. The information obtained allowed to determine that of the 100%, 84% are in the contracted category; 8%, ordinary-principal; 5%, ordinary-associate and 3%, ordinary assistant. Likewise, concerning the highest academic degree of the teacher, it was concluded that 53% have a master's degree and 47% have a doctorate; 49% of these degrees were obtained at a public university and 51% at a private university. The training plan reports allowed to obtain data such as: out of 100%, 86% are satisfied with the courses taken; 85% of these are related to university didactics; 8% to soft skills and 7% to research. Of the courses given, before the pandemic, 90% were only face-to-face. After reviewing the regulations governing the selection of teachers, they were held twice a year, before the beginning of each academic semester; 84% of them accessed a public call and a hiring process called Type A, which includes classifications: DC A1 (32 hours), DC A2 (16 hours), DC A3 (8 hours) and Type B: DC B1 (32 hours), DC B2 (16 hours), DC B3 (8 hours); the same that placed them 100% in a part-time dedication regime.

##### 4.2. Level of satisfaction with the management of teachers

Table 3 allowed analyzing the teacher's perception on a range of 1 to 5 and the minimum or maximum intervals on a scale of never,

Table 3. *Minimum, maximum, and average*

| items                  | Minimum | Maximum | Media | Deviation | items            | Minimum | Maximum | Media | Deviation |
|------------------------|---------|---------|-------|-----------|------------------|---------|---------|-------|-----------|
| Management of teachers |         |         |       |           | Job satisfaction |         |         |       |           |
| P1                     | 1       | 5       | 4.48  | .953      | P21              | 1       | 5       | 4.64  | -.672     |
| P2                     | 1       | 5       | 4.63  | .822      | P22              | 1       | 5       | 4.48  | .831      |
| P3                     | 1       | 5       | 4.52  | 1.009     | P23              | 1       | 5       | 4.57  | .710      |
| P4                     | 2       | 5       | 4.02  | 1.104     | P24              | 4       | 5       | 4.57  | .499      |
| P5                     | 1       | 5       | 3.93  | 1.024     | P25              | 4       | 5       | 4.57  | .499      |

seldom, sometimes, almost always, or always. These data allowed to assess their appreciation. Thus, a mean was obtained ranging from 3.09 to 4.66. The items that stand out are P8 if the curriculum allows them to know their duties and rights in their regulations (4.66); P2 establishes the profile of the position in the selection of the teaching staff (4.63); P9 verifies compliance with the academic degrees required by Law (4.59) and P11 Guarantees a teaching staff with methodological and didactic qualifications (4.55). On the other hand, P15, if there are economic or academic incentives as recognition for teaching work, presents the lowest mean (3.09). The results indicate that the faculty follows the aspects contemplated and that the teacher visualizes these actions that favor the fulfillment of the standards foreseen in the model.

In the results of the job satisfaction variable, the mean of 4.70 stands out in Q37: you feel satisfied with the technological support such as platform, Sivireno, virtual classroom, consultancies; followed by Q21: at what level you feel satisfied with the selection process of the teaching staff with 4.64. The questions on their level of satisfaction with the training and teacher improvement programs (Q23); the norms that guide the teaching management: statute, regulations, and directives (Q24); the methodological and didactic qualifications of the teachers of the program (Q25) and Q29: the recognition in their research work; reached, coincidentally, a mean of 4.57. It is concluded that the level of job satisfaction of the sample in a range of (1) and maximum (5) is positioned between 3.64 and 4.70, that is, a considerable number of indicators are being met; however, there are some aspects to be strengthened in personnel management.

|     |   |   |      |       |     |   |   |      |       |
|-----|---|---|------|-------|-----|---|---|------|-------|
| P6  | 1 | 5 | 4.11 | .985  | P26 | 1 | 5 | 4.41 | .708  |
| P7  | 1 | 5 | 4.30 | .989  | P27 | 1 | 5 | 4.54 | .687  |
| P8  | 3 | 5 | 4.66 | .581  | P28 | 1 | 5 | 4.20 | .999  |
| P9  | 1 | 5 | 4.59 | .848  | P29 | 1 | 5 | 4.02 | 1.087 |
| P10 | 1 | 5 | 4.41 | .826  | P30 | 3 | 5 | 4.41 | .626  |
| P11 | 3 | 5 | 4.55 | .601  | P31 | 1 | 5 | 3.66 | 1.240 |
| P12 | 3 | 5 | 4.46 | .571  | P32 | 1 | 5 | 3.68 | 1.237 |
| P13 | 2 | 5 | 4.30 | .851  | P33 | 1 | 5 | 3.46 | 1.128 |
| P14 | 1 | 5 | 3.71 | 1.057 | P34 | 1 | 5 | 3.68 | 1.237 |
| P15 | 1 | 5 | 3.09 | 1.311 | P35 | 1 | 5 | 4.00 | .853  |
| P16 | 1 | 5 | 3.52 | 1.221 | P36 | 1 | 5 | 3.64 | 1.052 |
| P17 | 1 | 5 | 4.05 | 1.227 | P37 | 1 | 5 | 4.70 | .807  |
| P18 | 1 | 5 | 4.13 | 1.222 | P38 | 3 | 5 | 4.39 | .528  |
| P19 | 1 | 5 | 3.54 | 1.525 | P39 | 3 | 5 | 4.57 | .535  |
| P20 | 1 | 5 | 3.64 | 1.212 | P40 | 1 | 5 | 4.29 | 1.057 |

The descriptive analysis, according to frequency distribution, was carried out in the low, medium, or high ranges. In Figure 5, teacher management is placed at a high level (83.9%) and 16.1% at a medium level; in the selection, evaluation, training, and development: 85.7% place it at a high level; 10.7% at a medium level, and 3.6% at a low level. In the teacher development plan: 71.4% place it at a high level, 17.9% at a medium level, and 10.7% at a low level. In dimension 4, recognition of teaching activities, 50% placed it at a high level, 35.7% at a medium level, and 14.3% at a low level.

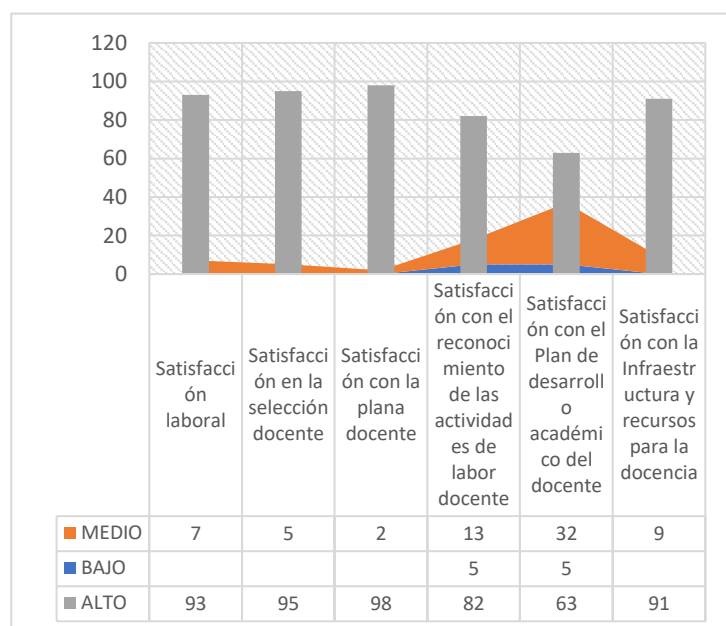


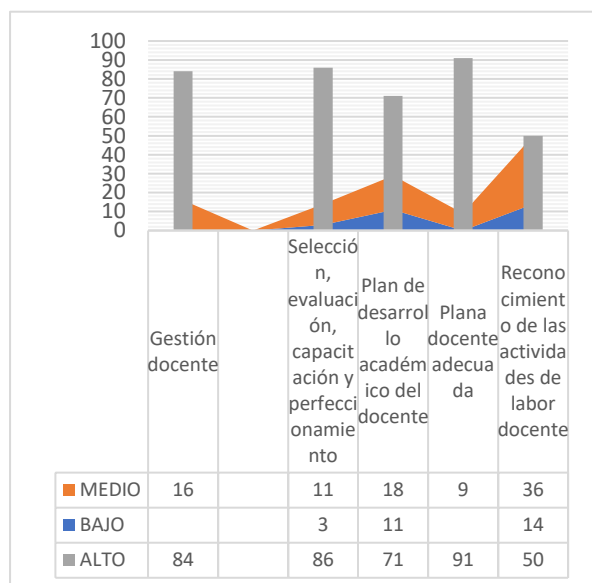
Figure 2. *Teacher management and dimensions*

Source: Percentage frequency of variable 1 and its dimensions.

Variable 2: job satisfaction is placed at a high level with 92.9% and 7.1% at a medium level. For dimension 1: satisfaction with teacher selection, 94.6% placed it at a high level and 5.4% at a medium level. In satisfaction with the appropriate teaching staff, 98.2% ranked it at a



high level and 5.4% at a medium level. In



dimension 3: satisfaction with the recognition of the teaching work, 82.1 % found it at a high level, 12.5 % at a medium level, and 5.4% at a low level. In satisfaction with the teacher's academic development plan, 62.5% placed it at

Table 4. Correlation between teacher management and job satisfaction

|                |                        | Management of teachers  | Job satisfaction |
|----------------|------------------------|-------------------------|------------------|
| Spearman's Rho | Management of teachers | Correlation coefficient | 1.000            |
|                |                        | Sig. (bilateral)        | .000             |
|                |                        | N                       | 120              |
|                | Job satisfaction       | Correlation coefficient | .715**           |
|                |                        | Sig. (bilateral)        | .000             |
|                |                        | N                       | 120              |

The result of the rho value was .715 evidencing a high correlation; also with a value of  $.00 < .05$ , which is statistically significant. This evidences that there is a significant relationship between teachers' management and job satisfaction (Mercado, 2017; Luján, 2018; Alvarado, 2020); therefore, it is a great commitment of the institutional manager to establish guidelines and directives that direct adequate management that will positively, directly and notoriously influence the personnel and their positive attitude. These aspects will allow observing how the staff assumes a commitment to their organization and its goals (Cruz and Bernui,2019). It is important for the dialogue between the manager and his staff to reach agreements, between what they expect and consider efficient management and what is

a high level, 32.1% at a medium level, and 5.4% at a low level, and in satisfaction with the infrastructure and resources for teaching, 91.1% placed it at a high level and 8.9% at a medium level.

Figure 3. Job satisfaction and dimensions

Source: Percentage frequency of variable 2 and its dimensions.

#### 4.3. Level of correlation between teacher management and job satisfaction

The Kolmogórov-Smirnov goodness-of-fit test was performed, showing a non-normal distribution ( $p < .05$ ) and, according to Guillen (2015), if this were to happen, the Spearman's Rho statistic should be used. This allowed performing the hypothesis test for each variable and dimension which you will be able to appreciate in the following tables. Also, I should add, that this process favored the analysis of the results to identify how each of the processed dimensions can affect job satisfaction.

being done; it is necessary to know their expectations and to ensure that these are achieved and provide satisfaction (Alvarado, 2020).

#### 4.4. Selection, evaluation, training, teacher development, and job satisfaction

Specific hypothesis 1 stated that there was a significant relationship between selection, evaluation, training, development, and job satisfaction of teachers. This proposition was accepted when obtaining as a result that the rho value was .672, showing a moderate correlation; also with a  $p$  value of  $.00 < .05$ , which is statistically significant. When observing that these processes directly affect job satisfaction, it is necessary to consider them not only for their effect but also for their repercussion. On the one



hand, teacher selection is a fair process that provides equal opportunities, followed by permanent evaluation that generates self-reflection. The evaluative process must be determined by key aspects: object, what is evaluated; purpose, why is it evaluated; procedure, how is it evaluated; instruments, with what is it evaluated; stages or moments, when is

it evaluated; and agents, who evaluates (Guzmán, 2018). On the other hand, training strengthens teachers' competence in research, social responsibility, management processes, and personal aspects (Andrade et al., 2020), which will give them greater representativeness in their field of action.

Table 5. *Correlation between teacher selection, evaluation, training, teacher development, and job satisfaction*

|                |   | D1                      | Job satisfaction |        |
|----------------|---|-------------------------|------------------|--------|
| Spearman's Rho | Teacher selection, evaluation, training, and continuing education | Correlation coefficient | 1.000            | .672** |
|                |   | Sig. (bilateral)        | .                | .000   |
|                |   | N                       | 120              | 120    |
|                | Job satisfaction  | Correlation coefficient | .672**           | 1.000  |
|                |   | Sig. (bilateral)        | .000             | .      |
|                |   | N                       | 120              | 120    |

#### 4.5. Adequate teaching staff and job satisfaction

Specific hypothesis 2 stated that there was a significant relationship between adequate teaching plans and job satisfaction; however, it is shown that the rho value was .347 evidencing a low positive correlation; therefore, the null

hypothesis was accepted. These data resulted similar to what was presented by Suárez (2018), who concluded that teachers' management in comprehensive training is insignificant. Likewise, Segura (2017) concludes that in the comprehensive training dimension, which includes this factor, there is moderate satisfaction.

Table 6. *Correlation between adequate teaching staff and job satisfaction*

|                |                         | Adequate teaching staff | Job satisfaction |        |
|----------------|-------------------------|-------------------------|------------------|--------|
| Spearman's Rho | Adequate teaching staff | Correlation coefficient | 1.000            | .347** |
|                |                         | Sig. (bilateral)        | .                | .000   |
|                |                         | N                       | 120              | 120    |
|                | Job satisfaction        | Correlation coefficient | .347**           | 1.000  |
|                |                         | Sig. (bilateral)        | .000             | .      |
|                |                         | N                       | 120              | 120    |

4.6 Recognition of teaching activities and job satisfaction

Specific hypothesis 3 anticipated the existence of a significant relationship between recognition of teaching activities and job satisfaction. The results show that the value obtained was .647, evidencing a moderate correlation; also with a p-value of  $.00 < .05$ , which is statistically significant, accepting the hypothesis. These conclusions are supported by Alvarado (2020), who proved the existence of a correlation between the educational management construct and extrinsic

satisfaction, considering in the latter, recognition, promotions, compensation, responsibility, and job security. Likewise, Guerrero and Vicente (1999) argue that university teachers are susceptible to praise and recognition, and it is the role of academic managers to check whether they are offering sufficient recognition. Likewise, Parada (2018) concludes that they should apply strategies aimed at raising motivational indexes: giving words of congratulations, a pat on the shoulder, and expressing "you did very well, keep it up", among other stimuli.

Table 7. *Correlation between recognition of teaching activities and job satisfaction*

|                |                                    |                         | Recognition of teaching activities | Job satisfaction |
|----------------|------------------------------------|-------------------------|------------------------------------|------------------|
| Spearman's Rho | Recognition of teaching activities | Correlation coefficient | 1.000                              | .647**           |
|                |                                    | Sig. (bilateral)        | .                                  | .000             |
|                |                                    | N                       | 120                                | 120              |
|                | Job satisfaction                   | Correlation coefficient | .647**                             | 1.000            |
|                |                                    | Sig. (bilateral)        | .000                               | .                |
|                |                                    | N                       | 120                                | 120              |

4.7 Academic development plan and job satisfaction

Specific hypothesis 4 proposed the existence of a significant relationship between the academic teacher development plan and job satisfaction. The statistical value obtained is .686 determining a moderate correlation; also with a p-value of  $.00 < .05$ , which is statistically significant. Therefore, the null hypothesis was

rejected. These results are supported by Mercado (2017), who proved in his study that there is a significant and high direct relationship (.885\*\*) between the planning dimension and job satisfaction. On the other hand, León (2018) proves the same relationship between academic development strategies and teachers' job satisfaction, considering within them the relevance of curricula, management for teacher training, and the use of resources.

Table 8. *Correlation between academic development plan and job satisfaction*

|                |                           |                         | Academic development plan | Job satisfaction |
|----------------|---------------------------|-------------------------|---------------------------|------------------|
| Spearman's Rho | Academic development plan | Correlation coefficient | 1.000                     | .686**           |
|                |                           | Sig. (bilateral)        | .                         | .000             |
|                |                           | N                       | 120                       | 120              |

|                           |                         |        |       |
|---------------------------|-------------------------|--------|-------|
| Job satisfaction          | Correlation coefficient | .686** | 1,000 |
| Academic development plan | Correlation coefficient | .000   | .     |
|                           | Sig. (bilateral)        | 120    | 120   |

\*\* Correlation is significant at the .01 level (bilateral).

## 5. Conclusion

The analysis of the factors that make up the accreditation model for university higher education study programs allows recognizing each of the standards, the interrelationship between them, the criteria they evaluate, the processes that must be followed, and its applicability. It will allow identifying the strengths and weaknesses of the study program, as well as measuring its influence on other directly related aspects, such as the job satisfaction of teachers, students, or graduates.

The documentary review and the data obtained from the questionnaires allow concluding that the management carried out in favor of the teachers will have an impact on their satisfaction and therefore, on the integral formation of the students, since this is a mediator of the learning construction process. It is also clear from this study that teacher selection is an essential part of the process of insertion of the worker into university life, its proper management will give him the security of transparent and fair participation that will invite him to continue strengthening his academic, research, and personal skills. It is important to consider that a limitation of this work is that the study sample was constituted by a considerable number of hired teachers, who by having access to constant evaluations can be more updated and prepared for the measurable aspects of this factor.

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