

Relationship Marketing Analysis for companies wishing to project workforce

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Abstract

The labor market operates under the same premise as any other product or service market in which there is supply and demand. There are great concerns that afflict the most suitable prospects for jobs in companies, since the job profiles of the last decade require great experience and intellectual skills for the positions to be filled in organizations. This situation creates difficulties for those Colombian professionals who recently graduated without any practical knowledge and with a lack of technical knowledge, thus increasing the number of unemployed professionals, who are raw and untapped human capital in Colombia. Therefore, there is a need to address the problem through relationship marketing, understanding factors that affect the gap between the requirements of the supplying market and the demanding market to achieve efficient communication between the parties and solidify the relationship between them.

Keywords: *relationship marketing, supply, demand, project, labor market.*

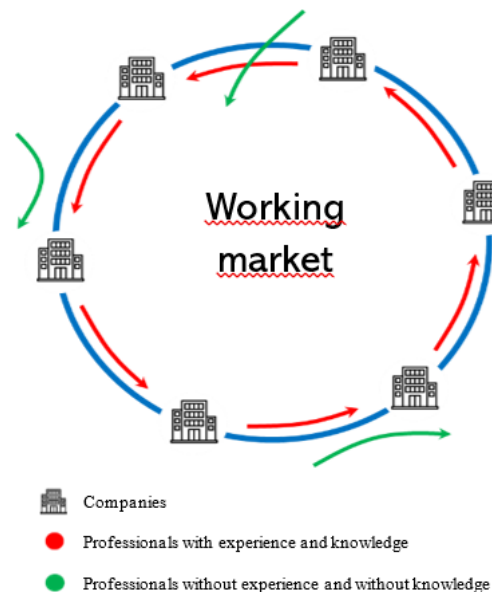
INTRODUCTION

In the Colombian labor market, after the Covid-19 pandemic started in 2020, unemployment rates increased and closed for the period in question with a rate of 12.3% [1], about 2 points more than in 2019 and 3 points in 2021 with 13.7% [2]. These figures generated great concerns in the liquidity of small and medium-sized SMEs, which were forced to lay off staff or in some cases to close their companies. It should be added that in Colombia, an average of 282,400 professionals graduate each year, of which 69,752 do not manage to find employment [3]. This is due to the fact that there are two scenarios in the labor market; in the first one there are unemployed professionals with a lot of experience, who are forced to accept jobs under minimal conditions and/or not in accordance with their knowledge. On the other hand, there are recently graduated professionals who do not find opportunities in the labor market, since they do not have work experience.

In addition, higher education institutions greatly affect intellectual and professional development regarding future opportunities, since most of them have not developed new teachings that are in line with the current needs of the labor market, maintaining an obsolete and static educational system [4]. Teachings based on traditional and theoretical subjects, relegating the practical model that expands the eternal problem of the theoretical relationship - educational practice [5], and the use of tools in trend, which makes it difficult for the professional not to have sufficient skills and knowledge to enter to compete in the Colombian labor market. Consequently, in the last 20 years the labor participation of young people in Latin America and the Caribbean has decreased by 5% [6]. Similarly, one of the main causes of unemployment among young people is the lack of experience (58%) and technical knowledge (15%) [7].

Thus, the sum of all the aforementioned factors directly affects the turnover of professionals in the market, making it very low, given that the same professionals are those who are in transition in the labor market, while new potential professionals are rejected for the above-mentioned reasons, as shown in Figure 1:

Figure 1. Rotation mechanics and labor market opportunities



Source: Own elaboration, 2022

Therefore, organizations propose quite demanding jobs in terms of their requirements and professional profiles with knowledge that is mostly acquired in the labor market and not in the transition of professional development.

This article addresses the current dynamics regarding the supply and demand of the labor market, which has become a rather limited field, since there is an excess demand for human capital without characteristics or knowledge requested by the market. Applying marketing strategies through the CRM philosophy, a 360-degree view of customers [8] (professionals and business organizations), identifying their needs and their relationship with their interests so that organizations can be

nurtured with new knowledge, generating improvements in their processes as well as dynamism in the labor market, from partnerships with universities that are in active search of future labor, which will be "cultivated" for the benefit of organizations.

For the above factors and reasons, this market, which is totally heterogeneous to traditional products and services, represents an opportunity to be studied in detail, it has a direct impact on the economic development of the country improving the conditions of the labor market, both for organizations and for the population growth that represents the high unemployment rates in the country, this in order to analyze a relationship marketing strategy to study the dynamics that traditionally precedes in the labor market.

Material and Methods

Aiming to establish the factors that affect the lack of opportunities in the labor market in Colombia and to identify the aspects that affect the relationship marketing between universities and companies, a qualitative research of descriptive type was conducted by means of an interview, due to the absence of previous studies with such approach in the country. Consequently, and taking into account the population of university students enrolled in undergraduate programs for the year 2022 in Colombia, a figure that has been affected by the pandemic causing a reduction of 11.3% of university students enrolled according to the Colombian Association of Universities - ASCUN [9]. A sample of 151 young people from different academic programs was determined, programs that present greater demand in the country's labor market [10], among them: Industrial Engineering, Mechanical Engineering, Systems Engineering, Environmental Engineering, Business Administration, Public Accounting and International Business. In this sense, we implemented a survey, whose

structure is composed of seven questions listed below:

1. Do you have work experience in your career field?
2. What has been the degree of difficulty in finding a job?
3. What do you think is the rejection factor for the job offers you have applied for?
4. Was the knowledge you obtained at the university enough to apply for the job offer you are interested in?
5. Do you agree with the content of the academic curriculum of the university where you are studying?
6. Do you study any subject outside your career?
7. What is the most important decision factor in choosing the company where you want to work?

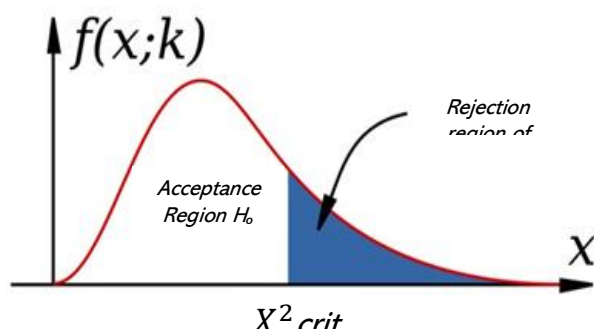
The information collected has a confidence level of 95%, so the data acquired has a high reliability rate and allows identifying with greater certainty the students' perception of the current disparity between education and labor requirements. On the other hand, a study was carried out with three companies that have presented constant difficulty in finding labor that meets the requirements of their vacancies. Within this framework, the same method of data collection was carried out based on a descriptive research with a survey consisting of six questions of interest, which are listed below:

1. What is the most requested university degree among the different vacancies?
2. What is the professional profile of the vacancies that are most difficult to find?
3. What areas of training are the applicants lacking?

4. What percentage of applicants do you consider overqualified?
5. What are the skills that young professionals have less developed?
6. What is the main factor for rejecting applicants?

Since the sample is not representative, the information collected is used as a reference for the analysis of the results. Similarly, depending on the analysis to be performed, the statistical test of the chi-square test of association and independence type is used to determine whether a qualitative variable is associated with another qualitative variable [11]. To do this, the expected frequency is calculated and compared with the frequency of the sample, resulting in the acceptance or rejection of the null hypothesis, which refers to the independence between the variables (see Figure 2).

Figure 2. Chi-square (χ^2)



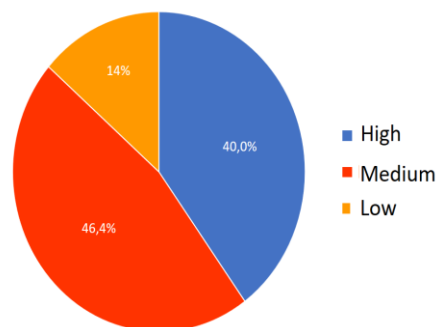
Source: Zapata, Fanny. Chi-cuadrado (χ^2): distribución, cómo se calcula, ejemplos [12]

Results

According to the resulting data, there is a greater supply of future graduates in the Industrial Engineering program, with 30.4% compared to the other careers, thus generating a high level of competition in the labor market. Likewise, the data collected show that only 13.6% of the sample population has no difficulty in finding a job, while the remaining

86.4% have difficulties in finding a job in the labor market of their interest (See Figure 3).

Figure 3. What has been the degree of difficulty in finding a job?



Source: Own elaboration, 2022

Furthermore, according to the correlation test of categorical variables, better known as the chi-square test [11], this factor is directly related to the poor perception regarding the content of the academic curriculum in the university institution of each individual surveyed, as demonstrated by the following result (Table 1 and 2):

Table 1. Chi-square test of the variables:

What has been the degree of difficulty in finding a job? Vs Was the knowledge obtained at the university sufficient to apply to the job offer of your interest?

Actual sample				
Knowledge acquired at university	Difficulty finding work and being accepted in the market			
	High	Medium	Low	Grand total
No	46	12	24	82
Yes	30	5	34	69
Total	76	17	58	151
Values	0,50331126	0,11258278	0,384106	1

Theoretical sample				
Knowledge acquired at university	Difficulty finding work and being accepted in the market			
	High	Low	Medium	Grand total
No	41,27	9,23	31,5	82
Yes	34,73	7,77	26,5	69
Total	76	17	58	151

Result Chi2				
Knowledge acquired at university	Difficulty finding work and being accepted in the market.			
	High	Low	Medium	Grand Total
No	0,5	0,8	1,8	3,2
Yes	0,6	1	2,1	3,8
Total	1,2	1,8	3,9	6,9

Source: Own Elaboration. 2022

Table 2. Results

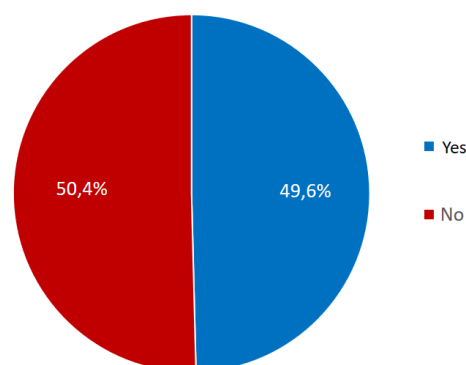
Data	Results
Chi Square	6,90690027
Chi Table	5,991
Degrees of Freedom	2

Source: Own Elaboration. 2022

In other words, the null hypothesis H0, which indicates that the variables compared are not independent, but are related to each other, corroborates the result that the knowledge acquired does influence the difficulty of positioning oneself in the labor market.

Consequently, and as the results in Figure 4 show, 50% of the population sample does not manage to take advantage of the knowledge acquired in the labor market.

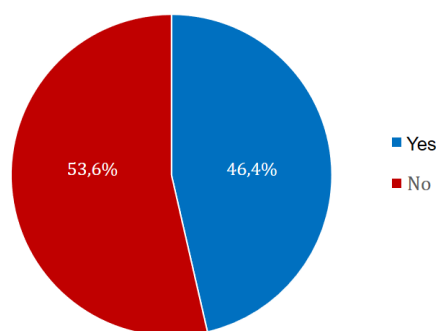
Figure 4. Was the knowledge you obtained at the university enough to apply for the job offer of your interest?



Source: Own Elaboration, 2022

Similarly, according to the needs expressed by employers, it is reiterated that one of the main determinants of rejection of an applicant is the lack of technical knowledge. In fact, it is denoted as a common factor, the need to acquire specialized or experienced staff in specific and technical topics such as: Cybersecurity and asset management, among others, which forces professionals to pursue other academic studies where from data collection, 53.6% are forced to learn tools and techniques that the university does not provide in its development as detailed in Figure 5:

Figure 5. Do you agree with the content of the academic curriculum of the university where you are studying?



Source: Own Elaboration, 2022

Additionally, the labor market based on the perception of the surveyed employers, candidates require strengthening their capabilities in the area of languages, leadership and soft skills.

However, it was necessary to identify whether the lack of knowledge acquired at university is related to the lack of work experience, for which the Correlation Test indicates the following:

Table 3. Chi-square test of the variables:

Do you have work experience in your career field? VS. Was the knowledge obtained at the university sufficient to apply to the job offer of your interest?

Actual sample			
Work experience	Knowledge acquired at university		
	No	Yes	Grand total
No	24	23	47
Yes	57	47	104
Total	81	70	151
Values	0,536	0,46	1

Theoretical sample			
Work experience	Knowledge acquired at university		
	No	Yes	Grand total
No	25,2	21,8	47
Yes	55,8	48,2	104
Total	81	70	151

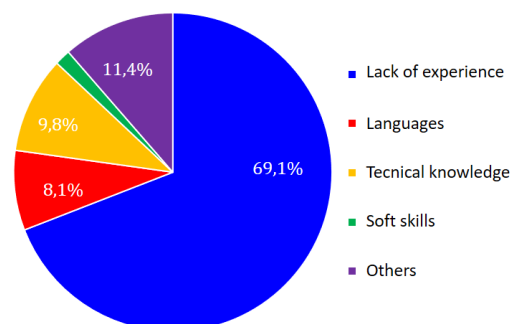
Result Chi2			
Wordk experience	Knowledge acquired at university		
	No	Yes	Grand total
No	0,058	0,067	0,126
Yes	0,0263	0,0305	0,057
Total	0,085	0,098	0,182

Source: Own Elaboration, 2022

According to the Chi² test [11], the lack of experience of an individual in the labor market is indifferent to the academic gaps presented at the university.

Even so, 69.1% of the students consider that the most relevant cause of rejection at the time of entering a job opportunity is the lack of experience, which based on the analysis of Table [1], knowledge does influence the opportunity to position oneself in the job and to acquire experience, but it does not mean that knowledge is interpreted in a manner directly proportional to experience. Which surpasses, by a large margin, technical knowledge and languages, as evidenced in Figure 6:

Figure 6. What do you think is the factor for rejection of job offers that you have applied for?



Source: Own Elaboration, 2022

This perception is enhanced by the correlation between the students' work experience and their difficulty in being accepted by the demands of the entrepreneurial ecosystem.

The aforementioned is reflected in the results developed in the chi-square test, which is visualized below:

Table 4. Results

Data	Results
Chi Square	0,182
Chi Table	1
Degrees of freedom	3,84

Source: Own Elaboration, 2022

Given the results, the behavior of the variables are independent, which means that there is no relationship between the variables (Table 5).

Particularly and with the analysis of Table 5, we corroborate the taboo that exists in the labor market, that is, knowledge and experience variables are independent of each other, but they are determining factors for a labor market given that by fulfilling one of them, one has the opportunity to enter a job, in the case of experience and given the results, where the hypothesis is rejected, it is interpreted that the variables analyzed do have a relationship, given that the Chi square [11] is higher than the Chi Table.

Table 5. Chi square test for the variables:

Do you have work experience in your career field? Vs what has been the degree of difficulty in finding a job?

Actual sample			
Difficulty finding work and being accepted in the market	Experience in the labor market		
	No	Yes	Grand total
Hight	32	43	75
Bass	4	14	18
Medium	11	47	58
Total	47	104	151
Values	0,311258278	0,688741722	1

Theoretical sample			
Difficulty finding work and being accepted in the market	Experience in the labor market		
	No	Yes	Grand total
Hight	23	52	75
Bass	6	12	18
Medium	18	40	58
Total	47	104	151

Result Chi2			
Difficulty finding work and being accepted in the market	Experience in the labor market		
	No	Yes	Grand total
Hight	3,2	1,5	4,7
Bass	0,5	0,2	0,7
Medium	2,8	1,2	4
Total	6,423250999	2,902815355	9,326066354

Source: Own Elaboration, 2022

Table 6. Results

Data	Results
Chi Square	9,326066354
Chi Table	5,991
Degrees of freedom	2

Source: Own Elaboration, 2022

Discussion

Under the development of this paper, we identified that, in order to increase job opportunities, there are 2 factors that determine professional development in the labor market as described below (Table 7):

Job Opportunity = (Experience + Knowledge)

Table 7. Results

Experience	Technical Knowledge	
	Yes	No
Yes	1	1
No	1	0

Source: Own Elaboration, 2022

It is interpreted that the job opportunity should never be equal to 0. Therefore, it is concluded that:

- The current labor market problem for recent graduates and professionals in development is that the gaps in knowledge and lack of experience are close to or equal to 0, and for this reason, 40% of them find it difficult to find a position in a company (Graph 3).
- The "Knowledge" factor, is a variable with a great weight in the labor market given that, despite the fact that it is not synonymous with "Experience", it understands to be an opportunity to enter to compete in the labor market, a situation that universities do not contribute enough according to the perception of students in professional development.
- The "Experience" factor, is also a variable of great weight given that, although it is not synonymous with "Certified Knowledge", it corresponds to greater opportunities in the position of a market, which is a consequence of the sum of job opportunities throughout professional development.
- It is important that academic institutions develop a post-sales exercise (after the graduation of their students), in order to help them seek a positioning in the market and generate a different experience for their clients.
- An articulated communication system of the intervening agents (Students,

Universities and Companies) in the labor market structure should be generated, listening to the needs and interests of the parties to be applied in the academic and labor dynamics.

Conclusions

The findings of this study reveal that there is a discrepancy between what the corporate market considers to be the main factor for rejection, that is, the needs of the corporate market, versus the perception of the labor supply market. This is because the companies reject them due to lack of technical knowledge, but the applicants consider that it is due to lack of experience. It is there where one of the great problems of universities is exposed, which keep their academic systems (curriculum) static, being oblivious to the dynamism of the world and its constant changes in the labor ecosystem.

A situation that generates critical consequences for an economy and that could be improved with an inclusive system that takes into account the opinion and needs of the market. A reflection of this, are the results of the study that reveal 34.4% of disagreement with the content of the academic curriculum of each program under study, being this portion of the population a source of information for universities on the topics that are needed, required and/or in trend. Likewise, this information could be related to the needs and requirements demanded by the labor market.

As a consequence, 53.6% of the labor force chooses to strengthen and/or expand their knowledge autonomously, creating a culture increasingly distant from formal education, which reduces the credibility of higher education institutions, which could become a reputational cost difficult to recover unless a transversal structure is generated to manage the relationship between companies, universities and students.

On the other hand, the experience of individuals interested in entering the labor

market does not meet the expectations of the market. Although this may be due to the lack of opportunities that can provide professional value to recent graduates, not only with internships that are often implemented in topics that are not very relevant or outside the field of interest, but also with spaces in semesters other than the final semesters where there is an approach between the interested parties.

At the same time, another element that affects the lack of experience of applicants is the instability and lack of consistency in the same job for a long time, which allows them to increase their knowledge by making it more specialized. This is where the expansion of the academic programs of educational institutions to improve their current focus on soft and interpersonal skills comes in. It is also necessary for companies to be interested in creating a system that favors the internal customer, i.e. the employees, to ensure a workforce with opportunities for professional development that can specialize in specific areas. For this, it is necessary to apply the same method to identify the needs of these individuals, as indicated by the 33.6% of the population whose decision to continue or choose a labor market is based on the best working conditions offer.

Reference

- [1] C. Bravo Adanaqué, *ESTRATEGIA DE MARKETING RELACIONAL PARA LOGRAR LA FIDELIZACIÓN DE LOS ESTUDIANTES DE ARTES Y DISEÑO GRÁFICO EMPRESARIAL DE UNA UNIVERSIDAD*, Chiclayo: UNIVERSIDAD SEÑOR DE SIPÁN, 2018.
- [2] AS Colombia S.P.A., «Desempleo en Colombia en 2021 se ubicó en 13,7%,» As Colombia, 31 01 2022. [En línea]. Available: https://colombia.as.com/colombia/2022/01/31/actualidad/1643666629_280794.html. [Último acceso: 20 05 2022].
- [3] Caracol Radio, «Tasa de desempleo en Colombia fue de 12,3% en agosto: DANE,» Caracol Radio, 30 septiembre 2021. [En línea]. Available: https://caracol.com.co/radio/2021/09/30/economia/1633021893_979681.html#:~:text=Desempleo-,Tasa%20de%20desempleo%20en%20Colombia%20fue,%2C3%25%20en%20agosto%203A%20DANE&text=El%20director%20del%20Dane%20manifest%C3%B3,el%20mismo%20mes%20de%202021..
- [4] A. Z. D. D. L. F. Daniela Tatiana Cerpa Ordoñez, *LA INFLUENCIA DEL MARKETING RELACIONAL Y LA IMPORTANCIA DEL ENFOQUE CRM EN LAS INSTITUCIONES PRIVADAS DE EDUCACIÓN SUPERIOR*, Universidad Católica San Pablo, 2021.
- [5] M. Caridad, M. I. Castellanos y M. F. Hernández, «MARKETING EXPERIENCIAL PARA LA PROMOCIÓN DEL PROCESO EDUCATIVO A NIVEL DE PREGRADO: UN ESTUDIO DE DOS UNIVERSIDADES PRIVADAS,» *Revista Facultad de Ciencias Económicas: Investigación y Reflexión*, vol. 23, n° 2, pp. 81-95, 2015.
- [6] I. D. V. A. Hugo Jesús Salas Canales, *Influencia del marketing relacional en los resultados organizacionales de las instituciones educativas privadas de las unidades de gestión educativa local 01, 02 y 04 ubicadas en los distritos de San Juan de Miraflores, San Martín de Porres y Puente Piedra*, Lima: UNIVERSIDAD NACIONAL MAYOR DE SAN MARCOS, 2017.
- [7] J. P. A.-Z. J. A. V. M. J. R.-R. Ledy Gómez-Bayona, «Análisis de las estrategias de marketing relacional en

- instituciones de educación superior de Colombia y España,» Retos: Revista de Ciencias de Administración y Economía, vol. 10, n° 20, 2020.
- [8] El Empleo, «Falta de experiencia afecta la empleabilidad de jóvenes latinoamericanos,» Empleo, 14 01 2021. [En línea]. Available: <https://www.empleo.com/co/noticias/noticias-laborales/falta-de-experiencia-afecta-la-empleabilidad-de-jovenes-latinoamericanos-6232>. [Último acceso: 05 06 2022].
- [9] I. G. Montero., «La educación actual ante las nuevas exigencias de la sociedad del conocimiento,» Revista Temas, 2002.
- [10] Organización Internacional del Trabajo, «Aumento de la exclusión de los jóvenes del empleo y la capacitación,» Informe Mundial sobre el Empleo Juvenil, 09 03 2020. [En línea]. Available: https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_737061/lang-es/index.htm. [Último acceso: 01 05 2022].
- [11] J. M. PIZARRO., La migración de mano de obra calificada dentro de América latina, Santiago: CEPAL, 1998.
- [12] F. Q. Ricardi, «Estadística aplicada a la investigación en salud,» Revista Biomédica Revisada Por Pares, p. 12, 2021.
- [13] Semana, «¿Cuáles son las profesiones con más salida laboral en Colombia?,» <https://www.semana.com/>, 2 12 2021. [En línea]. Available: <https://www.semana.com/finanzas/trabajo-y-educacion/articulo/cuales-son-las-profesiones-con-mas-salida-laboral-en-colombia/202135/>. [Último acceso: 14 06 2022].
- [14] Semana, «Por pandemia, cayó la cifra de matrículas universitarias en Colombia,» <https://www.semana.com/>, 3 03 2021. [En línea]. Available: <https://www.semana.com/educacion/articulo/por-pandemia-cayo-la-cifra-de-matriculas-universitarias-en-colombia/202105/>. [Último acceso: 10 06 2022].
- [15] Simla.com, «Por qué es necesario crear un perfil 360° de tus clientes,» <https://www.simla.com/>, 29 04 2022. [En línea]. Available: <https://www.simla.com/blog/perfil-360-grados-de-clientes#:~:text=Un%20perfil%20360%C2%B0%20hace,comunicarte%20mejor%20con%20tus%20consumidores..> [Último acceso: 10 06 2022].
- [16] M. Weise, «Las empresas tienen que empezar a considerar el lugar de trabajo como el aula del futuro,» El País - Madrid España, 2021. [En línea]. Available: <https://elpais.com/economia/formacion/2021-10-22/michelle-weise-las-empresas-tienen-que-empezar-a-considerar-el-lugar-de-trabajo-como-el-aula-del-futuro.html>. [Último acceso: 2022].
- [17] M. F. Q. Ruiz, «El desempleo en los jóvenes en Colombia, la otra crisis de la pandemia,» Plaza Capital - El Monedero, 2020. [En línea]. Available: <https://plazacapital.co/el-monedero/5062-el-desempleo-en-los-jovenes-en-colombia-la-otra-crisis-de-la-pandemia>. [Último acceso: 2022].
- [18] A. & R. L. L. Rodríguez García, «Aprender haciendo-Investigando: Caso de estudio paralelo en Colombia y Chile,» Revista Academia y Virtualidad, vol. 7, n° 2, pp. 53-63, 2014.
- [19] F. Zapata, «Chi-cuadrado (χ^2): distribución, cómo se calcula, ejemplos,»

Lifeder, 2020. [En línea]. Available:
<https://www.lifeder.com/chi-cuadrada/>.
[Último acceso: 2022].

- [20] C. Á. ÁLVAREZ, «La relación teoría-práctica en los procesos de enseñanza-aprendizaje,» *Educatio Siglo XXI*, vol. 30, n° 2, pp. 383-402, 2012.