



Knowledge on intellectual property as an advantage for scientific research

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Abstract

Protection of intellectual property represents a key factor for the establishment of particular rights in the scientific sector, and a clear registry of the technological development of a country. Strategies for the protection of industrial and intellectual property and copyright are relevant to maintain the administration of knowledge under control, confidentiality during its development, and assurance of exclusivity in research activities. The relationship between colleagues when presenting at a conference should be of trust, however, plagiarism is one of the main worries among researchers whenever they have to communicate their work among experts. Our objective was to identify the reasons why researchers do not protect their scientific work. Through our survey, we found that there is a lack of knowledge regarding protection of intellectual property. We conclude that it is important to educate researchers on the importance of protecting their work to improve the relationship of trust that exists between colleagues and students.

Keywords: *copyright, scientific work, intellectual property, research.*

JEL Codes: K11

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El conocimiento en materia de propiedad intelectual como ventaja para la investigación científica

Resumen

La protección de la propiedad intelectual representa un factor clave para el establecimiento de los derechos particulares del sector científico, y el claro registro del desarrollo tecnológico de un país. Las estrategias de protección de propiedad industrial y de derechos de autor son relevantes para mantener en control la gestión del conocimiento, la confidencialidad durante su desarrollo y la seguridad de exclusividad en actividades de investigación. La relación entre colegas para presentar una ponencia debería ser de confianza sin embargo el plagio es una de las principales preocupaciones de los investigadores cuando tienen que divulgar sus trabajos en donde generalmente están presentes expertos en la materia. El objetivo de esta investigación fue identificar los motivos por los cuales los investigadores no suelen proteger sus obras científicas, y mediante la aplicación de una encuesta se observó que se debe a la falta de conocimiento en el área de protección sobre la propiedad intelectual. Se concluye que es importante proponer la generación de conocimiento a los investigadores sobre las ventajas de la implementación de un proceso de protección de sus obras para una relación de confianza con colegas y alumnos.

Palabras claves: derecho de autor, obra científica, propiedad intelectual, investigación.

Código JEL: K11

1. INTRODUCTION

There is a common thread among educational institutions, universities, research centers, and innovation enterprises: the protection of intellectual property. Each achievement is claimed as exclusive for prestige, and in most cases, for the economic interest that allow the pursuit of cutting-edge technology.

Intellectual property protects all creations of the mind that can be presented and identified. Inventions are protected by patents, and creations by copyright, each with defining characteristics. An invention should be novel, be the fruit of inventive activity, and have industrial application. Created works should be authentic, and can be artistic, scientific, or literary in nature. A document that evidences its legality by any

judicial entity of intellectual property allows the holder to claim exclusivity, prevent its overuse and obtain economic benefits from its use.

In a research laboratory, biological processes are developed through trial and error, searching for the best result according to the variables and established criteria for their analysis, and depending on these characteristics they can be considered an invention. In biotechnology, research designs supply the methodological basis to add or remove elements to obtain precise goals; if these efforts do not reach the level of invention, then the project falls in a ditch, and its only protection is a locked drawer. Generally, these documents do not see the light, and all failed experiments become experiments that will be repeated by

someone else, at a loss of time, effort, and money.

The Mexican Copyright Law (Ley Federal del Derecho de Autor) (1996), in its first article, establishes the protection of author's rights in relation to their literary, artistic, or scientific work. The author is recognized as the only incumbent

of their work and can therefore obtain economic benefits from it. Frequently, papers are written about research that, although not necessarily inventions, they are huge leaps in the development of technological advances that are the basis of papers and undergraduate and graduate theses, works that are incredible valuable, but are sometimes plagiarized despite having an owner.

During this research, we observed a lack of understanding of the process of protecting scientific work through copyright. We documented legislation both for industrial property and copyright, noting distinctions and structural characteristics, as well as perceptions about inventions and scientific works.

A scientific work is a text that includes important protection aspects of intellectual legacy, related with the writings generated during the process of scientific research, from data obtained through laboratory work, and through failed experiments that pave the way to discoveries.

It is valuable to mention that intellectual property is related to creations of the mind and is divided in two categories: industrial property and copyright. Industrial property, which comprises invention patents, brands, industrial designs, and geographic indicators. Copyright encompasses literary works such as novels, poems, plays, movies, and music;

artistic work such as drawings, paintings, photographs and sculptures, architectural designs, and scientific works.

Intellectual property is first recognized in 1883 through the Paris Convention for the Protection of Intellectual Property and in 1886 through the Berne Convention for the Protection of Literary and Artistic Works, both administered through the World Intellectual Property Organization (WIPO), which has been overlooking the protection of creators and holders of intellectual property worldwide since 1970, and promotes the recognition and reward of the ingenuity of inventors, authors and artists through their protection. This organization seeks to stimulate creativity and broaden the limits of science and technology and enrich the world of art and literature (WIPO, 2020). Currently, the Mexican Law of Intellectual Property (2018) establishes in Article 10, Chapter II as an object of intellectual property all those scientific, artistic or literary creations expressed through any media or support, tangible or intangible, currently known or in the future.

Our objective is to offer the scientific sector clear knowledge that stimulates the protection of every written material in their laboratory notes, in order to protect their information through a copyright license.

2. MARCO TEÓRICO

2.1. *Design and Field of a Scientific Work*

According to Bernal (2006) "for scientific knowledge to advance in a valid and orderly manner, a general research method should fulfil the requisites specific to science." In his work he mentions an inventory of some of the main characteristics of science, such as that science is analytical, open and useful,

and that scientific knowledge is factual (true), that it transcends the facts, that it is clear and precise, communicable, verifiable, systematic, legal and predictive and that scientific research is specialized and methodical.

Designing a scientific work requires creating a structure based on financial, material and human resources. It requires having a research project where a problem is posed and then solved. The structure of the scientific work is an approach to the scheme to follow, and its design considers phases such as planning, development, monitoring, verification of results and finally validation.

Originality is an important point in the structure of a research design because it is what defines what can be considered and protected (Law of intellectual property, 2018). The different ways to elaborate a scientific work are given by the use of different methods and techniques are implemented at the different stages, directing the mental processes and the practical activities towards the achievement of the formulated objectives (Astudillo, 1995).

It is convenient to recognize that a "method" is an ordered set of activities, criteria and general procedures that guide scientific work to achieve an objective knowledge of reality. A "technique" is a set of rules and operations for the handling of the instruments that help the individual in the application of the method when an investigation is carried out; the technique must be adapted to the method that is used (Astudillo, 1995).

Scientific works differ from literary works in the particular methodological process that is involved in their creation, since it begins with the conception of an idea to be

investigated, later the subject is deepened by doing a careful bibliographic review in search of background. Once the particular aspects of the idea and the perspective from which it will be investigated have been specified, it is necessary to state the conditions of the research problem and define the population and the unit of analysis. Posing a problem implies specifying and formally structuring the research idea and expressing it with concrete and explicit terms, so that it is possible to apply scientific procedures (Gómez, 2006).

Scientific works belong to the scientific field, which differs greatly from how works are created in other fields, and they can stem from and lead to applied science. Each field or area of application has an essence according to its nature, it may or may not generate technical solutions, this being what differentiates scientific work from inventions.

2.2. Protection of Scientific Work by Copyright

The content of scientific works is protected by means of a support, not the idea itself, but the expression of the idea on the support. Supports can be tangible media such as brochures, books, manuals, documented research, writings, essays or notes, or intangibles such as lectures and conferences.

An author is the natural person who creates a work, and that single act of creation is what is attributed to the author by the Law of Intellectual Property. According to article 11 of the Federal Copyright Law (2020), copyright is the recognition made by the state in favor of all creation of literary and artistic works by virtue of which it grants its protection so that the author can enjoy of prerogatives and exclusive privileges of a

personal and patrimonial nature. And in its Article 16, it mentions that "The work may be made public through the acts described below:

- Dissemination: The act of making a literary and artistic work accessible by any means to the public for the first time, thereby ceasing to be unpublished.
- Publication: The reproduction of the work in tangible form and its making available to the public through copies, or its permanent or provisional storage by electronic means, which allow the public to read or know it visually, tactilely or aurally.
- Public communication: Act by which the work is made available to the general public, by any procedure that disseminates it and that does not consist of the distribution of copies, by wire or wireless means, including making the works available in such a way that the members of the public can access these works from the place and at the time that each of them chooses.
- Public representation or execution: Presentation of a work, by any means, to listeners or viewers without restricting it to a private group or family circle. The performance or representation that is made of the work within the circle of a school or a public or private assistance institution is not considered public, as long as it is not carried out for profit.
- Public distribution: Making the original or copy of the work available to the public through sale, lease and, in general, any other way.
- Reproduction: The creation of one or more copies of a work, a phonogram or a

videogram, in any tangible form, including any permanent or temporary storage by electronic means, even if it is the two-dimensional realization of a three-dimensional work or vice versa."

The work as such is the expression of the original structure that was generated, and although the idea may be carried out by another, it cannot be protected in the same way without being cited, even if the support is different. In *Property of Ideas*, Chaloupka (1988) mentions that in patent law the object of protection is the technical solution expressed and not the writing or the schematic and that despite the differences offered by copyright and industrial property, both have in common that the object of protection and exclusivity are not pure ideas. According to Bercovitz (2006), if the work were to be accessed by the public for the first time without the consent of the author, such disclosure would be considered illegal.

2.3. Perception of Plagiarism by the Scientific Community.

In Mexico, the National System of Researchers (SNI, Sistema Nacional de Investigadores) is the body that recognizes the work of people who are dedicated to producing scientific and technological knowledge, and grants, through a peer evaluation, the appointment of a national researcher—a distinction that symbolizes quality and prestige of scientific contributions.

It is estimated that by having a copyright certificate in the scientific field, we can help motivate researchers to protect their works by copyright, generating more publications that facilitate the application and reward in stimulus programs.

We captured the perception of researchers on a relevant topic such as plagiarism, so a group made up of 14 researchers with the following characteristics was taken:

- university professors-researchers,
- generators of scientific knowledge,
- involved in applied science,
- members of the National System of Researchers

The question posed was the following: as a generator of scientific knowledge, what are your concerns when you disseminate your research in a course or symposium?

There is a real concern on the part of the researchers (57%) that their research will be plagiarized, although the resulting metric was surprising because a higher percentage was expected. Perhaps it is due to the fact that the question was very close to the idea of the information being exposed, since most researchers keep their documents, logs, and daily research notes in files in such a way that they cannot see the light.

The intentionality of plagiarism implies fraud and has a double aspect: deception about the true contribution of the authors and about the originality and novelty of the information.

Plagiarism is committed by "using words, images, processes, elements of structure and design, ideas, etc. from others and presenting them as their own"². It affects published and non-published materials obtained through privileged channels (peer review process, evaluation of theses or research projects, etc.) and harms authors by not recognizing their contribution to the generation of knowledge.

3. METODOLOGÍA

3.1. *Sample*

In December 2018, a questionnaire was distributed in digital format with the help of Google Forms by institutional mail. A random survey was applied to a representative sample of researchers, their participation was voluntary and anonymous, all researchers belong to the UANL.

3.2. *Method Selection*

The data collection was carried according to protocol, using questionnaire to a sample of 14 researchers through an interview.

The survey designed was a research process on its own, from the design of the sample, the construction of the questionnaire, the interview, the coding, the organization and monitoring of the field work, the preparation of data for the analysis, the analysis techniques, the software involved and the presentation of results.

Depending on the administration method, a combination of personal and email surveys was chosen. Double-sided printed physical surveys were used and handed over to researchers from the UANL College of Biological Sciences. Additionally, the questionnaire was distributed in digital format with the help of Google Forms through institutional mail.

A representative sample of researchers was randomly selected from each stratum; their participation was voluntary and anonymous. Based on its temporality, the survey refers to a specific moment in time and corresponds to static studies that seek to reflect a phenomenon at a given moment.

The unit of study and analysis was the scientific community. The sampling unit in

this case is the researchers from this community. It is worth mentioning that the population has strata, in this case they are the categories within SNI.

Stratified random sampling with proportional allocation was used. In this sampling, the population is divided into several groups with similar characteristics among them and then some of the groups are completely analyzed, discarding the others.

For the sample calculations, the following formula was used, where P is the proportion of the population considered positive, whereas Q represents the negative fraction of the population. The size of each stratum was also calculated using a formula. An error of 5% was considered.

$$n = \frac{\sum_{i=1}^1 N_i P_i Q_i}{ND + \frac{1}{N} \sum_{i=1}^1 N_i P_i Q_i} \quad (1)$$

Size of each stratum

$$n = n \left(\frac{N_i}{\sum_{i=1}^1 N_1} \right) = n \left(\frac{N_i}{N} \right) = n(W_i) \quad (2)$$

Error

$$E = \frac{d^2}{Z_{1-\alpha/2}^2} \quad (3)$$

As can be seen in Table 1, the number of surveys carried out is below the sample size for each of the strata by 12 units. This discrepancy is due to the difficulty in locating researchers with SNI recognition, coupled with their multiple occupations and the limited accessibility to answer the survey within the established period. Despite the difficulties related to the sample size, the analysis was continued based on the data collected. The real size of each of the groups (Ni), was provided by the Deputy Director of Research of the College of Biological Sciences, UANL. The data were generated on January 1, 2018 and collected on August 9, 2018.

TABLE 1. BREAKDOWN OF THE CALCULATIONS FOR A STRATIFIED RANDOM SAMPLING IN THE SCIENTIFIC COMMUNITY

Grupo	Ni	Pi	Qi	PiQi	NiPiQi	Wi	ni	Real
Level 1	68	0.75	0.25	0.19	12.75	0.45	44	31
Level 2	16	0.75	0.25	0.19	3.00	0.11	10	4
Level 3	6	0.75	0.25	0.19	1.13	0.04	4	1
Candidate	21	0.75	0.25	0.19	3.94	0.14	14	10
Sin SNI	40	0.75	0.25	0.19	7.50	0.26	26	40
	151				28.3125		98	86

Elaborated by the authors

3.3. Survey

We used a questionnaire made up of 11 questions. The questionnaire was reviewed by external advisers: M.C. Suku Roxana Mejía Castillo, lawyer graduated from the Colleges of Legal Sciences of UNAM, M.C. Alba Ma. López López, lawyer graduated from the

College of Legal Sciences of the University of Madrid Spain, ISC. Xicoténcatl Alfaro Terán, Systems Engineer from UNAM and Dr. Roberto Mercado Hernández, professor from the UANL College of Biological Sciences.

The questionnaire consists of two sections: a brief introduction and the section of

questions with dichotomic and categorized accentuation, made up mostly of closed questions, but open questions are also included. Throughout the survey there are two types of questions based on their function: in battery, since all the questions address the same topic and control to verify the veracity of the responses. Based on their content, questions can be classified as action, opinion and motive.

The structure of the questionnaire (Annex 1) for the scientific community consists of two sections; the first of them consists of an invitation to collaborate with the study, as well as introductory information; and the compilation is made up of 11 questions, five of which are open questions, and six are multiple choice. In the particular case of question number 11, as it is an open answer, we chose to use the Weft QDA program, since it specializes in the categorization of textual information and builds a matrix in which the categories are placed in the rows and columns used; the boxes that report the total of joint occurrences of these categories. The program creates specific matrices when we segment the sample of observed units in such a way that it allows us to compare the appearance of certain categories in different groups. From this program it was possible to export the matrix and its respective frequencies to Excel to simplify its analysis, additionally it allowed to categorize open and comparable responses.

3. RESULTS

The first stage of the Multilevel Qualitative Analysis (MCA), a specific procedure for the analysis of qualitative information, specifically for the information contained in interviews, consisted of translating the qualitative information into

categorized variables, always following a pattern of simplification of the information. The result was the construction of a data matrix that contains the units of analysis and the categorical variables or attributes of those units of analysis.

In other words, each of the questions was considered as a unit of analysis and each of the different answers corresponded to the categorical variable; for example, in question 8 of the survey (Annex 1), the question: Do you have copyright records? is the unit of analysis and the answers Yes and No correspond to the categorical variables. For the process of categorizing textual information, the Weft QDA program has been chosen for its accessibility, an open access computer tool used for textual analysis in the social sciences. This program allowed the creation of qualifying categories as the interviews were analyzed in depth.

Despite being a local study, it was possible to count on the perceptions of researchers from other nationalities, national researchers who studied abroad, and researchers from various states and universities. Similarly, it can be seen in Table 2 that the study participants belong to various lines of research, ensuring a greater number of points of view within different fields of knowledge.

As can be seen in Table 1, it was not possible to comply with the number of surveys necessary to have a representative sample of the population of researchers belonging to the SNI, despite this, there is the participation by researchers of each of the areas of knowledge in the College.

Out of the 53.48% of researchers surveyed that belong to SNI the participation of the SNI 1 category stood out at 36%, followed by 11.62% of candidates to the SNI.

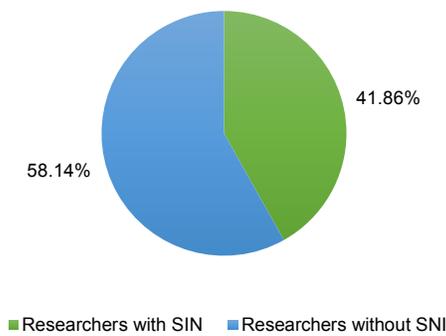
TABLE 2. RESEARCH LINES OF RESEARCHERS SURVEYED

Research Lines of Researchers Surveyed	
1. Mycology	19. Hystology
2. Botany	20. Parasitology
3. Nanotechnology	21. Molecular Systematics
4. Aquaculture	22. Legislation
5. Biotechnology	23. Herpethology
6. Entomology	24. Phycology
7. Immunity and Cancer	25. Bioprocesses
8. Virology	26. Neuroscience
9. Chemistry of Natural Products	27. Synthetic Biology
10. Proteomics	28. Biomaterials
11. Food Biotechnology	29. Biophysics
12. Arthropods	30. Bioinformatics
13. Molecular Biotechnology	31. Resource Management
14. Biostatistics	32. Morphophysiology
15. Applied Ecology	33. Molecular Evolution
16. Bioremediation	34. Conservation Biology
17. Biofuels	35. Plant tissue culture
18. Phytopathology	36. Plant biotechnology

Elaborated by the authors

Figure 1 shows that of 100% of the researchers surveyed, 41.86% have a SNI appointment and 58.14% do not.

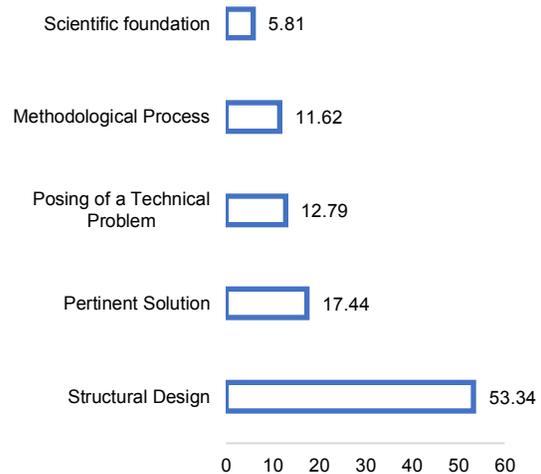
FIGURA 1. SNI SITUATION OF SURVEYED RESEARCHERS AT THE COLLEGE OF BIOLOGICAS SCIENCES, UANL. 2018



Source: Elaborated by the authors

According to Figure 2, the results show that 52.34% of the surveyed researchers consider the scientific foundation as the main characteristic of a scientific work, followed by 17.44% who consider the methodological process, 12.79% who consider the approach to the technical problem, 11.62% think it is a relevant solution and 5.81% consider structural design.

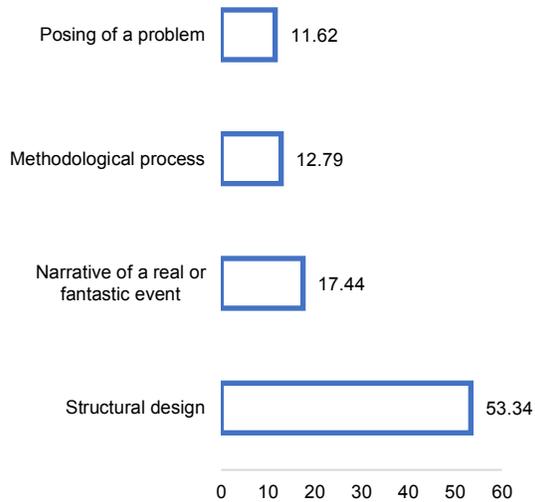
FIGURA 2. CHARACTERISTICS OF A SCIENTIFIC WORK ACCORDING TO THE RESEARCHER SURVEYED.



Source: Elaborated by the authors

According to Figure 3, the results show that 40.72% of the researchers surveyed consider structural design as the main characteristic of a literary work, followed by 37.20% the narration of a real or fantastic event, 13.95% a methodological process, and 8.13% to the posing of a problem.

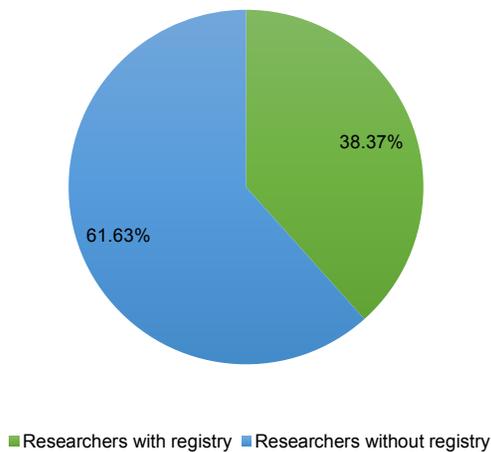
FIGURA 3. CHARACTERISTICS OF A LITERARY WORK ACCORDING TO RESEARCHERS SURVEYED.



Source: Elaborated by the authors

Figure 4 shows that only 38.37% of the researchers surveyed have copyright records with INDAUTOR, therefore 61.63% of the researchers do not have records.

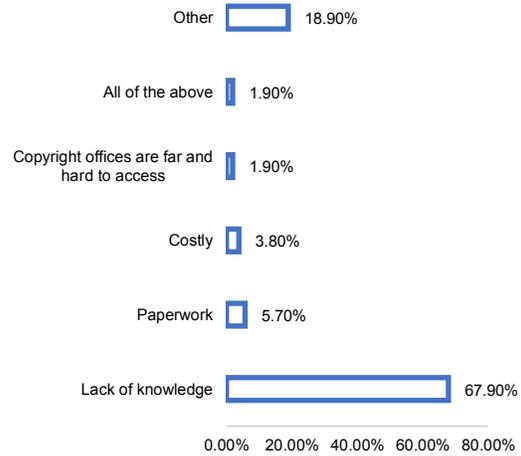
FIGURA 4. COPYRIGHT REGISTRY BEFORE INDAUTOR



Source: Elaborated by the authors

Figure 5 shows the percentage of reasons why the surveyed researchers answered that they did not have copyright records.

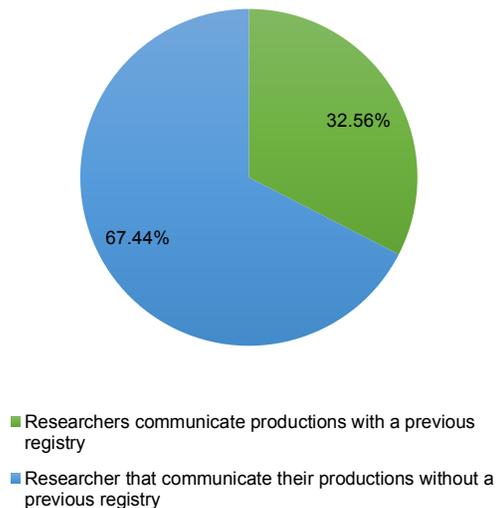
FIGURA 5. REASONS WHY SURVEYED RESEARCHERS DO NOT HAVE COPYRIGHT REGISTRATIONS.



Source: Elaborated by the authors

Figure 6 shows 67.44% of those surveyed disseminate their productions without prior registration.

FIGURA 6. COMMUNICATION OF SCIENTIFIC WORK WITHOUT PREVIOUS REGISTRY.

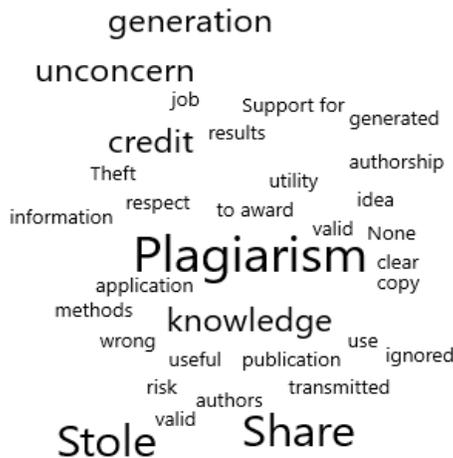


Source: Elaborated by the authors

In Figure 7 it was observed that the predominant word is “plagiarism” when the researcher surveyed was asked about his main

concerns when he published his research in a course or symposium.

FIGURA 7. WORDS MOST COMMONLY MENTIONED BY THE SURVEYEEES WHEN ASKING ABOUT THEIR MAIN WORRY REGARDING COMMUNICATION OF THEIR RESEARCH



Source: Elaborated by the authors

4. DISCUSSION

For the analysis, 86 researchers were surveyed, which was not a representative sample of the 151 total that are part of the UANL College of Biological Sciences, since 98 researchers were needed to strictly comply with the proportional stratified sampling. The list provided was generated in 2017 by the Research Directorate of the College of Biological Sciences, and provided in January 2018, there is the possibility that after the time of surveys some researchers have lost their SNI recognition or moved to another College. Another impediment to reaching the representative sample was researcher availability. Despite not having a representative sample, the trend was clearly defined so that even with full participation, the 12 individuals who did not participate in the study would not have been representative enough to modify the trend presented.

According to Figures 2 and 3, the results show that the structural design is the least considered characteristic by the researchers surveyed to refer to a scientific work, whereas this same characteristic is considered the main one in the literary work. This could be what possibly stops researchers from taking the initiative to protect their research by copyright, since it may be that they do not associate the term "literary" with something scientific.

Figure 4 shows that only 38.37% of the researchers surveyed have copyright records with INDAUTOR, therefore 61.63% of the researchers do not have records. There is a national statistic generated from the INDAUTOR database (2020), which mentions that the number of records in 2011 was 35,675 and in 2017 it was 51,677, representing an increase of 16,002 records in only 6 years. The above is worrying because this data includes not only the scientific community, but also sculptors, singers, architects, writers, etc.

This study made it possible to show the lack of knowledge about copyright, among 61.63% of the respondents who do not have copyright records, ignorance of the subject predominates among the reasons, with 67.9% of the respondents who answered that they do not know about the subject of copyright. Generally, when there is a lack of knowledge on the subject, they lose the opportunity to have exclusivity over their works as holders of an official certificate from the government, to be able to commercialize it as well as being able to demonstrate its scientific production, in the case of university researchers. To increase these numbers, we could encourage the scientific sector to protect their works, by generating knowledge about copyright, and presenting the advantages that derive from

this. In this work, it was observed that 61.63% of the researchers surveyed do not have records with INDAUTOR, a figure that could be changed to benefit Mexico's intellectual property indicators.

67.44% of the researchers interviewed disclose their research without prior copyright registration. As can be seen in Figure 6, only 38.37% have records in INDAUTOR, which constitutes a very high risk of plagiarism by colleagues, and even the general public, when publicly disseminating their results.

In accordance with the SNI Regulation, the evaluation considers the quality and quantity of the production of scientific and technological research, as well as the participation in the training of human resources, therefore by granting a copyright certificate under the title of scientific work, it would be possible to increase the number of copyright registrations within the area, contributing with productions not only in greater quantity, but also of high quality since under that registration title they would be taken into account for stimulus programs more easily (CONACYT, 2020).

5. CONCLUSIONS

The results of the research showed in the respondents (all research professors but with different areas of knowledge), are concerned about plagiarism when disclosing their work, the survey also reflected that most researchers do not have a culture of protection of the results of their research. It was found that the lack of knowledge of the respondents from the UANL College of Biological Sciences on the subject of copyright protection is the main reason for the non-protection of their scientific works,

which limits the increase in protected productions of the university.

It is concluded that there is a great window of opportunity to establish and implement a process for the protection of intellectual property among the scientific community of the institution, for which it would be necessary to instruct researchers in copyright matters so that they can add to the statistics and thus reduce the large number of works released without registration.

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ANEXO 1

La Obra científica

Estimados investigadores: Se les invita a participar en la siguiente encuesta, con el propósito de establecer la percepción de la comunidad científica sobre la protección de la obra científica por Derecho de Autor, en pro del reconocimiento a investigadores autores en la ciencia, como figura jurídica marcada en la Ley. Cabe mencionar que un "Registro Público del Derecho de Autor" es un documento que tiene por objeto garantizar la seguridad jurídica de los autores, de los titulares de los derechos conexos y de los titulares de los derechos patrimoniales respectivos y sus causahabientes, así como dar una adecuada publicidad a las obras, actos y documentos a través de su inscripción (INDAUTOR, consultado el 15/03/2020). <http://www.indautor.gob.mx/preguntas-frecuentes-generales.php#>

1. Género
 - Masculino
 - Femenino
2. Institución que otorgo el grado (Licenciatura y posgrado)
 - Respuesta
3. Años dedicados a la investigación
 - Respuesta
4. Línea actual de investigación
 - Respuesta
5. ¿Cuenta usted con reconocimiento SNI?
 - Sí
 - No
 - i) En caso de contestar SI, ¿Cuál es su nivel?
 - Nivel 1
 - Nivel 2
 - Nivel 3
 - ii) ¿En qué área?
 - A1 Físico-Matemáticas y Ciencias de la Tierra
 - A2 Biología, Química y Ciencias de la Vida
 - A3 Medicina y Ciencias de la Salud
 - A4 Humanidades y Ciencias de la Conducta
 - A5 Ciencias Sociales
 - A6 Biotecnología y Ciencias Agropecuarias
 - A7 Ingenierías
6. ¿Cuál de las siguientes características considera como principal en una obra CIENTÍFICA?
 - Diseño estructural
 - Proceso metodológico
 - Fundamento científico
 - Planteamiento del problema técnico
 - Solución pertinente
7. ¿Cuál de las siguientes características considera como principal en una obra LITERARIA?
 - Diseño estructural
 - Proceso metodológico
 - Planteamiento de un problema
 - Narración de un hecho real o fantástico
8. ¿Cuenta con registros de Derechos de Autor?
 - Sí
 - No

- i) Si su respuesta es No, marcar el (los) motivo (s)
 - Desconocimiento
 - Trámites engorrosos
 - Es costoso
 - Lugar del Trámite lejano y poco accesible
 - OTRO:
9. ¿Ha publicado obras en su campo de investigación?
- Sí
 - No
- i) En caso de contestar Sí, ¿Bajo qué rubros?
- Respuesta
10. Actualmente INDAUTOR otorga un Certificado de "Obra literaria" a las Obras Científicas. Sin embargo, es posible la inclusión de un Certificado de Derecho de Autor bajo el título de "OBRA CIENTÍFICA" como figura jurídica marcada en la Ley; en pro del reconocimiento a los investigadores. ¿Cuál es su postura al respecto?
- De acuerdo
 - En desacuerdo
 - Neutral
11. Como generador de conocimiento científico; ¿Cuáles son sus preocupaciones cuando divulga su investigación en un curso o simposio?
- Respuesta