Factors of reading comprehension in elementary school students of a rural educational institution in the sub-region of Los Montes de Maria in the department of Bolivar - Colombia[1]

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Abstract

This research article identified the factors associated with weak reading comprehension in a group of students enrolled in elementary school in a rural educational institution at high risk of forced displacement and armed violence located in the sub-region of Los Montes de Maria in the department of Bolivar, Colombia. The methodology used was descriptive with a mixed approach, that is, qualitative, quantitative, explanatory and inferential, which allowed, through a holistic and rational approach, to identify the factors that affect the reading comprehension of the selected population corresponding to 79 students, 52 parents and 5 teachers. The results showed that 57% of the students with medium evaluation grades expressed having ease in the interpretation of the texts read, i.e., this is related to the difficulties (28%) that the students express have with the interpretation of the text read and its correlation with the existing objects in the surrounding environment.

Keywords: Reading comprehension, factors, elementary school, Educational Institution.

Resumen

El presente artículo de investigación permitió identificar los factores asociados a la débil comprensión lectora en el grupo de estudiantes matriculados en la educación básica primaria en una Institución Educativa rural de alto riesgo de desplazamiento forzado y violencia armada ubicada en la subregión de Los Montes de María en el departamento de Bolívar- Colombia. La metodología abordada fue de tipo descriptivo con un enfoque mixto, es decir, cualitativa, cuantitativa, explicativa e inferencial, el cual permitió a través de un enfoque holístico y racional, identificar los factores que inciden en la comprensión lectora de la población seleccionada correspondiente a 79 estudiantes, 52 padres de familia y 5 docentes. Los resultados mostraron que el 57% de los estudiantes con grado de evaluación medio, expresaron tener facilidad en la interpretación de los textos leídos, es decir, esto se relaciona con las dificultades (28%) que expresan tener los estudiantes con la interpretación del texto leído y su correlación con los objetos existentes en el entorno que le rodea.

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Palabras clave: Comprensión lectora, factores, básica primaria, Institución Educativa.

1. Introduction

This research seeks to know and address the process of reading comprehension, a very important topic in the educational field, which is so complex in its methods and skills, and has become a priority for its study in school content. For this reason, the government has included it in its National Development Plan: pact for Colombia pact for equity, 2018-2022 (Zamudio, 2019) for Colombians to improve their educational level. In this sense, the results obtained, particularly in the Saber Language Tests, show deficient performances in elementary and junior high school students in grades 3, 5 and 9, which do not show significant progress in the performances of such tests (ICFES; 2020; MEN, 2021).

Such results are comparatively evidenced when evaluating the national averages in Language for the year 2021 for the immediately preceding year 2020, which obtained an insufficient (25%) level in students. The reality is that today our students show apathy for reading, and when reading, they do not understand, and this is evident at the time of presenting the Saber Tests, given that the results are not as expected (Londoño and Chirinos, 2021). Such results contrast with insufficient and minimum performance levels, equivalent to 7% and 23%, respectively, obtained at the national level by students in the third grade of elementary school who took the Language Test.

This has resulted in that students identifying main ideas and relating but presenting difficult-to-understand information from different writings, with little ability to criticize, to express the why of things, and, in short, they do not show argumentation, which is limited only to the action of reading a text without the minimum understanding and appropriation of the theme of the text read (Muñoz, 2019). On the other hand, something interesting is that students identify the basics of reading, such as the title, characters and sometimes the main idea, but their great difficulty lies in the fact that students do not understand, do not analyze and do not criticize what they read, this generates a major problem for them given that it is difficult for them to generate new knowledge. In this sense, text comprehension is important since it allows students to identify, know and compare reality with written codes, facilitating meaningful learning and argumentation of what they have read. In addition, students, as the main actors of the interactive process supported with technological tools, will be able to develop the necessary skills to improve the reading process.

This research aims to study the factors that affect the low reading comprehension of students enrolled in elementary school in a high-risk rural educational institution (IE) located in the sub-region of Los Montes de María in the department of Bolívar, Colombia. And with which it is intended to analyze the elements that hinder the development of skills for the improvement of reading comprehension rational and logical understanding in the students under the study of this research.

The methodology used was descriptive with a mixed approach, i.e., qualitative, quantitative, explanatory and inferential, which allowed, through a holistic and rational approach, to identify the factors that affect reading comprehension in the selected population of 79 students, 52 parents and 5 teachers. Likewise, different types of tools such as direct observation, guided interviews and documented information were considered sources of primary and secondary information to obtain accurate and pertinent data that will contribute to the purpose of the research.

This research project addresses several topics: first, the concept of reading, then the elements of reading comprehension, interactive strategies (including meta-comprehensive learning strategies), and finally, strategic approaches supported by ICT tools that help to improve students' reading comprehension are explained.

2. Frame of Reference

Background of the reading process

The study of reading has aroused the interest of many areas of science, particularly cognitive psychology and linguistics. This has implied, from the nature of each area, the analysis of the complexity of the reading process both in the students and in those directly responsible (educator). Therefore, this commitment should be given only by identifying the means and techniques that allow the student to identify, know and relate what is read with the object elements that are part of the environment in which the student is immersed (Pacheco, 2022).

This is how this synchronous student-object-environment interaction materializes the complex process of reading, which is determined by the reader's symbolic experiences that allow him to understand and learn about the object identified, thus facilitating the meaningful understanding of the elements that surround him (Barrios and Díaz, 2022).

González (2022), for their part, expresses that the first approaches to the concept of reading were developed by Edmund Burke Huey in 1908, who awakened a deep sense of research due to the complexity of the reading process, especially when the reader internalizes the comprehension of the text read. Consistent with Huey's studies, other researchers have also contributed to the study of the reading process, which has become a topic of general interest that continues to be investigated due to its importance and complexity (Rovira et al., 2022).

The reading

According to Paredes (2022), the reading process involves the knowledge of the signs and graphics representing the known object stored in mind. That is, the connection of the symbolic representations known by the reader with his experiential knowledge relates him to his environment, allowing him to communicate, explain and reproduce what others understand. In this sense, Chura, Valero and Calderón (2022) consider that learning is also a complex process in which both linguistic and cognitive factors participate, which are considered necessary factors for achieving the learning process. Additionally, the importance of developing the linguistic factor in children to facilitate the comprehension of written messages and what is read is emphasized. Likewise, the development of the cognitive factor is required, facilitating the progress of the child's working memory, and allowing to understand the sentences of a paragraph.

Another factor that is also important in the reading comprehension process is semantic memory, which allows the child to relate the known stored objects in mind and its subsequent understanding of the words that represent the text (Pérez, 2022).

On the other hand, Alvarado (2022) states that reading is the process through which written codes are internalized and understood. Moreover, this comprehension results from the interaction between the text, its form, content and its relationship with previous objects known to the reader, which enables the knowledge and understanding of what is read. In this sense, the reading process, in addition to the previous knowledge of the objects stored in mind, requires the development of skills that facilitate the decoding of words, the inference and understanding of the ideas that contribute to the construction of the meaning of sentences, as well as the construction of the idea that the reader encodes to explain his concept of what is understood (Fernández, 2022).

According to Sanahuja et al. (2022), from the contemporary perspective, reading is a constructive process in which the reader, according to his knowledge and experience of the known elements, identifies, understands and correlates the meanings of the written words read. This process of construction and comprehension of the written codes of the text may vary according to the mental graphic representations of each of the objects that represent, in the reader's light, what is known (Apaza, 2022). That is why, in the reading process, the reader immerses himself in the text, intervening actively and reacting according to his experiences, which allows him to interpret, construct and explain what is understood

from his experiential construct. This recording of what is read results from good reading comprehension and the reader's capacity to make inferences, relate and explain what is implicit in the reading comprehension process.

Reading comprehension

The process of reading comprehension is knowing the meaning of the codes of the written text, which allows the mental internalization of the meaning of each of the words that give meaning to what is known, relating it to its reality. This process of meaning construction and comprehension allows the reader to obtain information from the text and reflect on what has been interpreted (Loayza, 2022).

In essence, there is a convergence that reading comprehension is the construction and correlation of the meanings that the reader configures in his mind for the text. In addition, for the success of the reading comprehension process, the teacher-counselor must regulate, meditate and participate in developing the student's reading and writing skills (Huayta, 2022).

Likewise, Sillcahue (2022) circumscribes reading comprehension within the cognitive approach, which can be internalized as a product and a simultaneous process. That is to say, it is the product of the relationship between the reader and the text understood, and it is the mental process of knowledge and interpretation of the codes of the text read. The information resulting from the interpretation of the text can derive in the reader, on the one hand, the complete understanding of the text and, on the other hand, the formulation of questions that answer the unknown codes of the written text (Castro, 2022). In this order, the information stored in long-term memory plays an essential role in determining the reader's success in correlating all the knowledge of the surrounding environment with the decoded text (Aguilar, 2022).

Studies such as Valqui (2022) argue that reading comprehension is the process by which the reader's previous knowledge converges with the author's representation of the codes. In this section, the reader's previous experience with

knowledge of the surrounding objects is emphasized, which will make possible the construction and comprehension of the written text (Estrella, 2022).

Reading comprehension levels

For Estrella (2022:11), the reading construction process is understood from the levels of knowledge and comprehension and meaning that the repetitive reading action scales. Likewise, the research highlights real difficulties in reading comprehension among students and suggests that this requires prompt attention with the prompt implementation of strategies at the four levels of the educational system: elementary, primary, secondary and higher education.

As previously stated, reading comprehension ends up being a process of construction of the personal meaning of the text through active interaction with the reader, which should be based on the development of the reading comprehension levels required by the reading comprehension process: literal, inferential and critical (Fatama, 2022).

Level of literal comprehension

It corresponds to recognizing everything that can be easily interpreted and understood in the text. In order to achieve this basic comprehension capacity, it is necessary to work with all students to extrapolate and interrelate individual experiences and learning to higher levels, allowing a superior comprehension of what has been interpreted (Ramírez and Fernández, 2022). Among the actions that the teacher can perform to stimulate reading comprehension are the following: identify the details of the text, specify the space, time and main and secondary characters, chronological sequence of events and facts, identify the meaning of words and sentences, remember passages and details of the text, make sense of words with multiple meanings, identify synonyms, antonyms and homophones and finally, recognize and give meaning to prefixes and suffixes (Martínez, 2022).

According to Fresneda (2022), the process of knowledge in reading can be defined as structural

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maps that provide theoretical identity and relate it to meaningful learning. Furthermore, structural maps can be defined as a skill that designs its application differs from the resources and methodologies defined (Peña and Pérez, 2022). In this sense, structural maps are supported by the learning theories of Ausubel et al. (1976), which are not applied in classrooms to promote meaningful learning with students belonging to elementary school (Álvarez and Patiño, 2022).

Consequently, the meaningful learning process seeks that the student is the constructor of his learning through his interactions, experiences and experiences leading to a change in his learning (Ramos, 2022). Furthermore, according to Miranda (2022), this means that the reader, by internalizing what he/she has read, interacts within the text and puts it into practice in his/her context, constructing experiential learning. For Piaget (1981), this is a process in which the child internalizes what he/she reads and takes it to the context where he/she develops to relate previous knowledge with what he/she finds in the text, thus forming a meaning.

According to Piaget (1964), adaptation is presented in two essential elements: assimilation and accommodation. The first refers to how the child adds a new concept to his previous knowledge, thus forming a new concept. In the strategy to strengthen the literal level of reading comprehension with the support of computer information technologies (ICT) and the second, the current organization (an attribute of intelligence formed by the stages of knowledge) is modified to adjust to the new information. In learning development, reading comprehension is manifested in an evident way according to the teaching approach in the classroom. Compared with the memoiristic one, the significant one is projected to use the concept map as a didactic tool (Vilcanqui and Solís, 2022).

Reading comprehension supported by ICTs

The topic of reading comprehension has been studied in past decades by many researchers interested in designing and implementing strategies supported by ICTs for better comprehension (Castro and Sevillano, 2022),

given its relevance within the cognitive process of learning. According to Torres and Becerra (2022), "*the first reading comprehension research was developed in a context in which behaviorism was the paradigm of knowledge in educational research.*" The narrative about teaching children to read has been the point of inflection and discussion, given that no absolute answer or method explains the process of phonological or visual letter recognition as the only way of learning. Authors such as Holleday and Sentí (2022) suggest that the solution to this dilemma combines these two methods, defined as an interactive model. However, this model is still unknown because it is little used in the classroom; this is explained by the marked behaviorist tendencies of reading and writing based on relationships and associations of images and symbols.

For this reason, it has been seen as a mistake for teachers to think of acquiring achievement in the reading process when it has not even begun because teachers end up teaching rigid methods of reading (as if the act of reading were always the same) when the ideal is to seek the development of strategies that allow students to be effective readers in different possible reading situations (García, 2022; Sánchez and Escobedo, 2021).

At present, the teaching processes, although not all, present limited reading comprehension strategies, which leads us to think that learning is still not constructed, still favoring memorization. However, for the constructivist conception, learning is to construct, and learning, as also defended by Zhinín, Viteri and Ayala (2021), is not copying reality since "we learn when we can construct a personal representative for an object of reality or content that we can understand, which implies learning from experience, interests and previous knowledge through which we construct our meaning, a means that allows interaction and, therefore, the learning of reading and its comprehension" (Alvarado 2022: 25).

In this sense, for Musci et al. (2022), this process of learning is carried out thanks to two strategies, first, decoding which has to do with the relationship between the grapheme-phoneme of a word and second, comprehension, which has to do

with the representation of words and the construction of meanings. Moreover, according to Arreola and Coronado (2021), reading cannot be seen as a linear process but as a construction of meaning, interactive and repetitive; that is why one of the failures of the teacher when teaching reading is that he makes the student look for the educational logic to fix the task set, thus making passive readers, thus depriving the student of the organization of his processes of adduction or hypothetical inferences, engrossing him in the simple deciphering of words and denying him the possibility of constructing meanings (Andruetto, 2021). This implies transactions between the reader, the text and the context, in which the teacher's work is highlighted, as he/she shares the meanings he/she constructs when reading and motivates students to do the same in a sharing process, where interaction is essential to increase comprehension.

For Juric et al. (2022), this understanding should be based on the procedures that define the detailed description of each activity to be followed in a process. Likewise, Garrido et al. (2022) point out that the main objective of the procedure is to obtain a better way to carry out an activity. They also state that strategies are summarized in teaching methods, techniques and skills for reading, which are a process of verifying predictions for the construction and comprehension of texts.

Sanizaca (2022) also explains that the strategies include three actions, a before, a during and an after, within the reading process that helps people to understand this process. The first consists of choosing a reading and what to expect to find in it. The second is made up of the elements that intervene at the moment of reading based on the activation of previous knowledge. Furthermore, the third occurs at the end of the reading, making the content clear through rereading. In this order, the importance of the type of reading that most pleases them is emphasized, taking into account their interests and achieving a good reading. By doing it, they will know what they expect from it, and they will have clarity about the elements that make it up, and that intervene, activating their previous knowledge and appropriating the content of the reading, making this a meaningful learning,

with it is intended that students are good readers so that they are protagonists and acquire autonomy in their reading process (Muñoz, 2019).

3. Methodology

In this study, a descriptive type of research with a mixed approach was considered, that is, qualitative, quantitative, explanatory and inferential, which allowed, through a holistic and rational approach, to identify the factors that affect the reading comprehension of the selected population corresponding to 79 students, 52 parents and 5 teachers enrolled in basic primary education of a rural Educational Institution (IE) at high risk of violence located in the sub-region of Montes de María in the department of Bolívar.

The method used to carry out the research was deductive because it is based on general methodologies related to the causes that limit reading comprehension in the research group.

This research was developed through the following 5 phases described below:

Phase 1: Theoretical review of the factors that affect the reading comprehension of the group of students, teachers and parents selected in the IE located in the sub-region of Montes de María in the department of Bolívar, to identify the relevance of the components that decrease the reading comprehension of the students under study.

Phase 2: Conceptual review of the elements to be considered to strengthen the students' critical level in the process of meaningful cognition.

Phase 3: Application of questionnaires to third-grade students, teachers and parents. This phase will include designing and applying a questionnaire addressed to the selected sample. Prior to the final application of the structured questionnaire to the defined population (students, teachers and parents), a pilot test was conducted on a sample equivalent to 20% (28 people), for the systematic validation, coherence and correlation of each of the questions, to the purpose of the research.

Phase 4: Data analysis and interpretation: in this stage, the data collected from the questionnaires

were analyzed in order to carry out a descriptive analysis, where the data obtained from the responses to the questionnaires were presented, organized and summarized using tables and graphs that represent the essential characteristics of the data.

Phase 5: Drafting and delivery of the final document: in this phase, the final project was drafted together with the results obtained.

3. Research results

3.1. Identification of the factors that influence the low reading comprehension of third-grade students.

The following are the results of the application of the structured survey to the entire population defined as students, parents and teachers enrolled in elementary school in a rural educational institution (IE) at high risk of violence located in the sub-region of Montes de María in the department of Bolívar.

Figure 1 shows the ease with which students interpret the texts read, corresponding to the Academic factor.

Figure 1. Ease with which students interpret the texts read.

Source: Authors.

From Figure 1, it is observed that, of the total of elementary school students surveyed, 43% with medium evaluation grades expressed having ease in the interpretation of the texts read, while 18% presented difficulties in the interpretation of such texts, standing out from the group surveyed, in the valuation of 41% of the high and medium-high grades, related to the ease in defining and paraphrasing what was read. Regarding the degree of reflection made by the students, graph 2 shows that 55% of them present a low abstraction related to the author's position expressed in the text read.

In the question of Figure 2, related to the relationship between the text read and the environment that surrounds the student, they responded identifying an average relationship of 43%, with tendencies to a low (28%) relationship between the text read and the environment with which it interacts and which allows the comprehension and interpretation of the text read. Of these students, 15% stated that they have a high comprehension of the texts read, which allows them to maintain a high relationship with the object of the text and its environment.
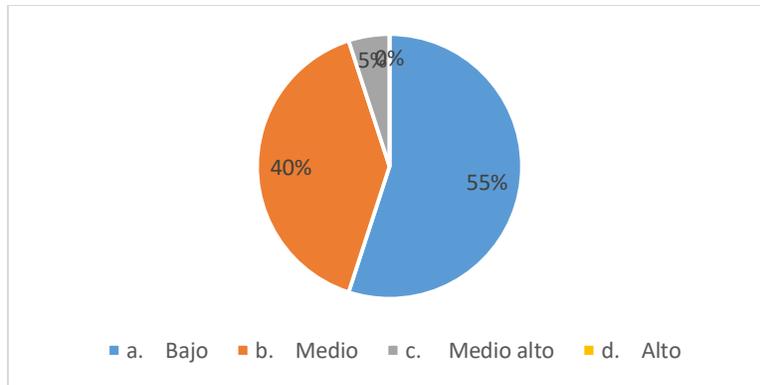
Figure 2. Reflection on the author's position
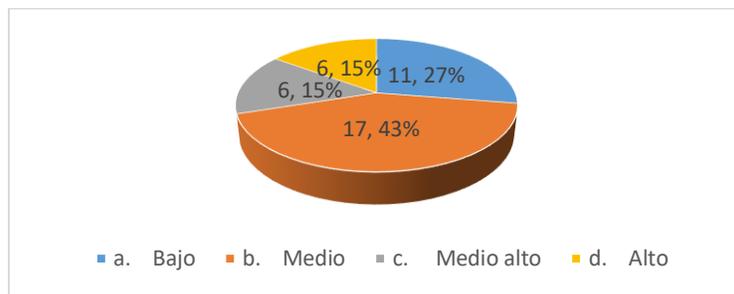
Source: Authors

Figure 3. Degree to which students relate the text read to their environment.

Source: Authors

Regarding the type of reading done by students in the classroom of the group of students consulted, it was found in Figure 4 that 45% of these students prefer to read children's stories to a high degree, followed by science fiction with 30% in the middle grade and to a low degree readings with a horror classification. In the case of the type of children's reading. This correlates with the average age of the children surveyed, which is 8 years old.
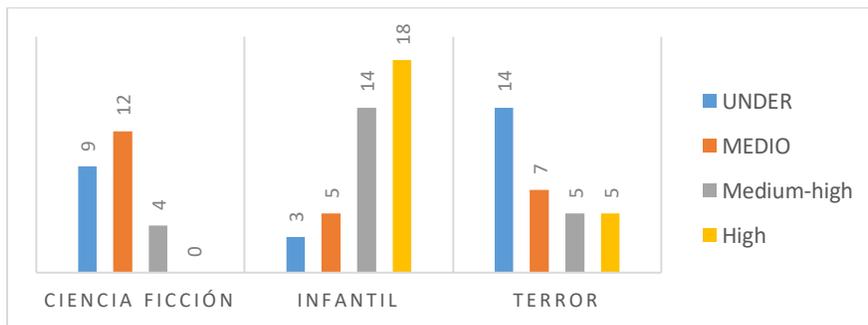
Figure 4. Type of readings done by students in classrooms.

Source: Authors

The results of Figure 5 show that 55% of the students are at a medium-high level of motivation to read at school due to the ludic activities developed in class, and However, 33% expressed having the medium and low motivation to participate in classroom reading activities. Only

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13% of third-grade students were highly motivated to do any reading in the classroom.
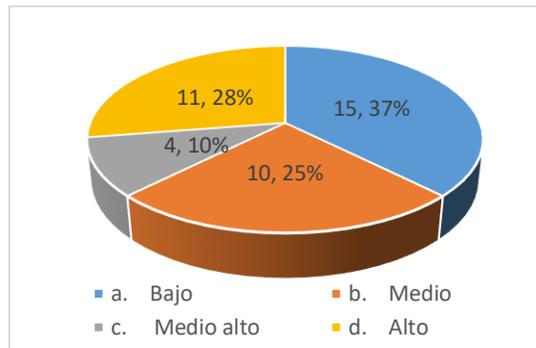
Figure 5. At what grade level do students find the motivation to read at school?

Source: Authors

In this question of Figure 6, students in a medium-high grade with 38% show apathy for reading in general due to the low availability of texts to read at school and at home and the low reading habit. This contrasts with the low apathy towards reading 63%, allowing to maintain the motivation towards reading.

From Figure 6, it could be observed that the greatest difficulty (22.5%) presented by the students for the realization of the reading process is the lack of motivation or low passion for reading, followed by 72.5% about the medium-low comprehension of the texts read in any place, home or school. It is highlighted that the students did not show difficulty in applying the reading techniques that facilitate the comprehension of what was read; however, this correlates with the lack of knowledge of these techniques on the part of the surveyed student.
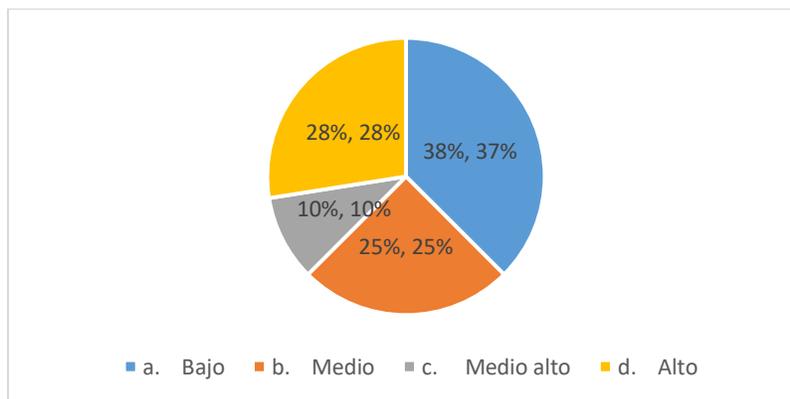
Figure 6. Students show apathy for reading.

Source: Authors
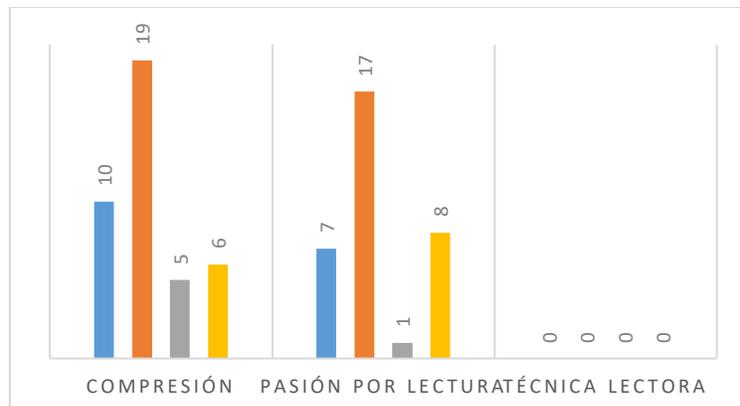
Figure 7. Aspects of reading with greater difficulty for students.

Source: Authors

Of the materials used to support the reading process in the elementary school students of the rural IE, it was found that 10% use, in a medium-high proportion, the library as a medium for reading; that is, the rest of the student population (90%) does not use this medium for reading. The 37.5% use, to a medium-low degree, the existing resources in the library. The students scarcely use books and pamphlets, with 0.75% (Figure 8).
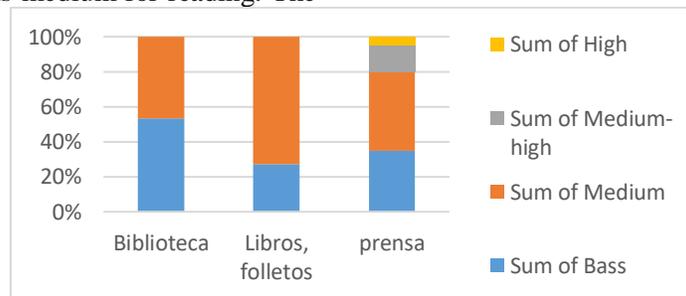
Figure 8. Materials used in the didactics of reading.

Source: Authors

In relation to the results obtained from the survey applied to parents, the following aspects resulting from the objective opinion of said parents stand out:
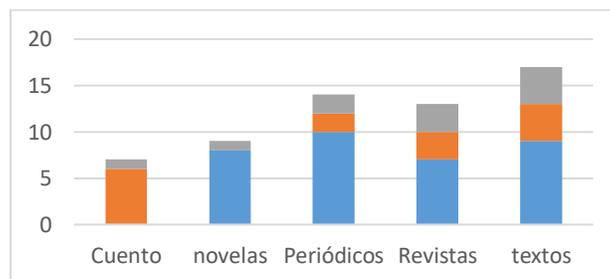
Figure 9. Materials kept at home to encourage reading.

Source: Authors

In Figure 9, for the question asked, it was observed that 50% of the parents surveyed keep little material such as newspapers, magazines, novels and texts to encourage reading at home. Therefore, it can be said that parents who keep little material to read at home have a high probability that their children do not like to read because they do not have the material, much less see their parents doing it. While another group of parents (30%) expressed that if they keep stories to read at a medium level, the rest (20%) of parents affirmed that they keep texts at a medium-high level to read, thus encouraging their children to read in greater proportion with the texts they have at home. Therefore, it can be asserted that parents keep little material at home to encourage their children's interest in reading.
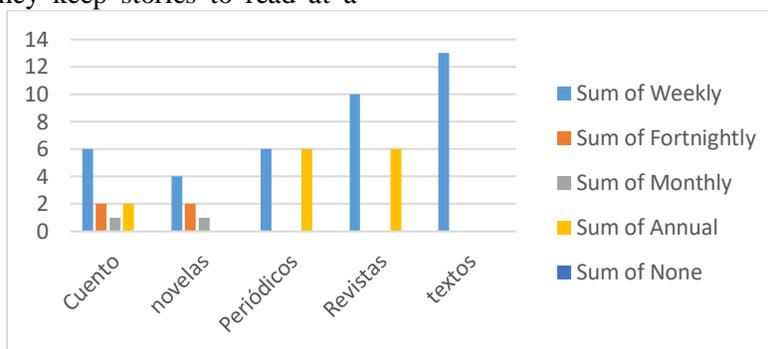
Figure 10. Frequency of child's reading.

Figure 10 shows that 65% of parents say that their children read texts, journals and newspapers weekly, while another 20% say that their children read novels every two weeks, and 10% say that they read stories monthly. Therefore, parents respond to this question by relying on the school, given that, despite having little reading material at home, their children bring home homework so they can only work with the support materials represented in magazines, newspapers and texts.
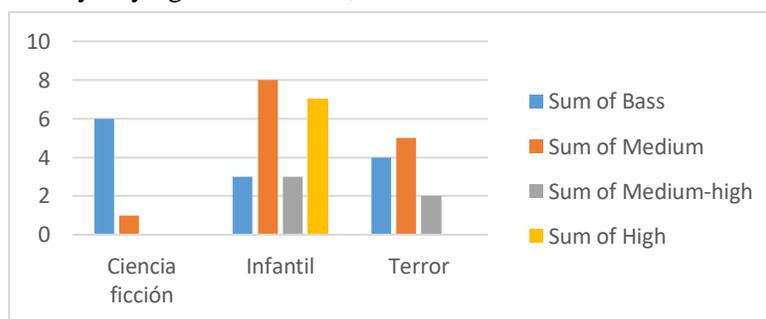

Figure 11. Type of reading students read in class.

From Figure 11, it can be said that 40% of the parents were very sure that what their children most like to read are children's stories, placing it at a medium level, going to high; for horror stories, they say (25%) that their children like them, placing it at a medium and medium-high level. The stories On the other hand, they like to read the lea
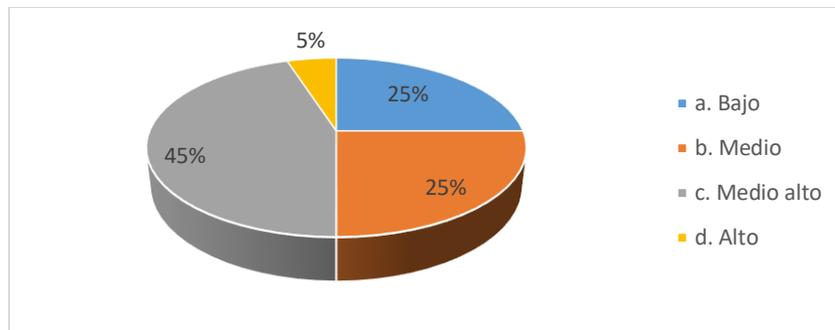
Figure 12. Degree to which parents read and write.

Source: Authors

Figure 12 shows that 45% of parents read and write in a medium-high grade, while another group obtained 25% in a medium grade and 25% in a low. Only 5% of parents claim to read and write without difficulty, so it can be said that most parents read and write. This allows them to help their children in their learning process. In contrast, if we have parents who do not read or write, their children will have more problems in their learning process since they will have a more limited vocabulary and difficulties developing comprehension skills and abilities that will allow them to advance in their learning process.

Figure 13. Time you spend to encourage your child to read.

Source: Authors

Figure 13 shows that 50% of parents dedicate time to their children's reading one hour a week, while 20% only dedicate three hours a week, another 15% of parents say they dedicate five hours a week to reading, and the remaining 15% do not dedicate any time to their children's reading.
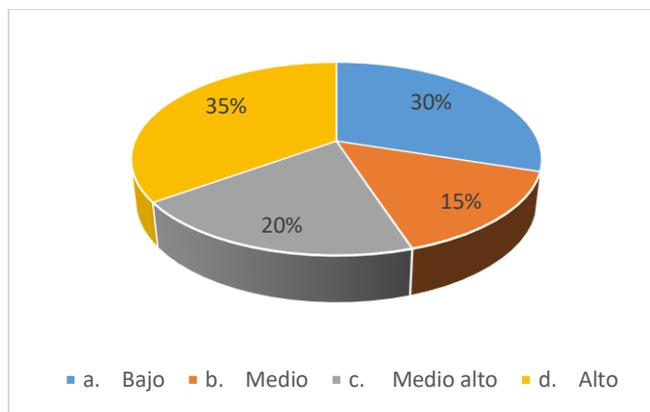
Figure 14. Degree of incidence of reading on academic achievement.

Source: Authors

Figure 14 shows that 35% of parents express the importance of reading in children's academic performance since reading will allow them to develop skills and abilities in reading comprehension for life and the process in other areas.

Another group of parents (30%) said that reading is not important for academic performance, 20% said that it is important with some inconsistencies, occupying the medium-high level, and the remaining 15% said that it is important with many doubts, placing them in the medium level.
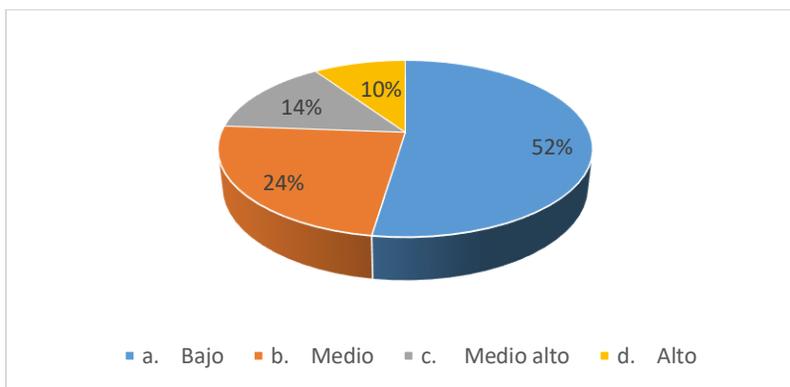
Figure 15. To what degree is the home environment suitable for reading?

Source: Authors

Figure 15 indicates that most of parents say that their homes are not adequate to encourage reading because sometimes they do not have the materials at hand for their children to read, and most families come from dysfunctional homes that, in one way or another, affect the tranquility of the children and an inadequate environment, reaching 52% in the low grade. Twenty-four percent of the parents surveyed stated that sometimes their home is adequate for reading, placing them in the middle grade, and the remaining 14% of the parents also stated that sometimes it is adequate, placing them in the upper middle grade, and only 10% of these parents stated that it is adequate for reading.

Next, the third part of the application of the surveys to the teachers of the rural elementary school helps to know the appreciation of the teachers according to the academic, social, cultural, personal, technological and other factors that affect the reading comprehension of the students.
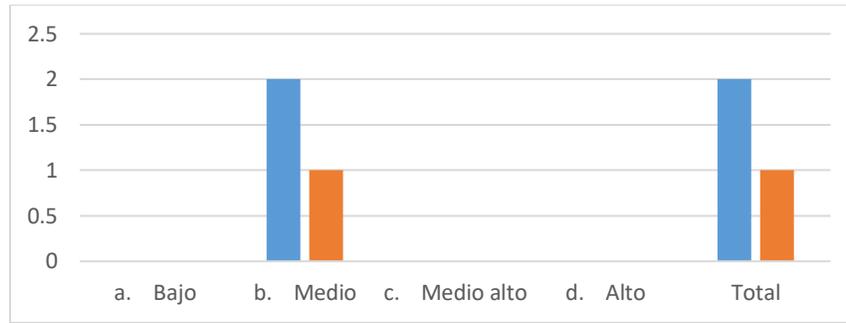
1. Academic factors

Figure 16. Ease with which students interpret the text read.

Source: Authors

From Figure 16, it can be observed that 100% of the students interpreted what was read in the middle grade, while the low, medium-high and high grades presented 0%; that is, the students managed to relate the main idea of the analyzed text.
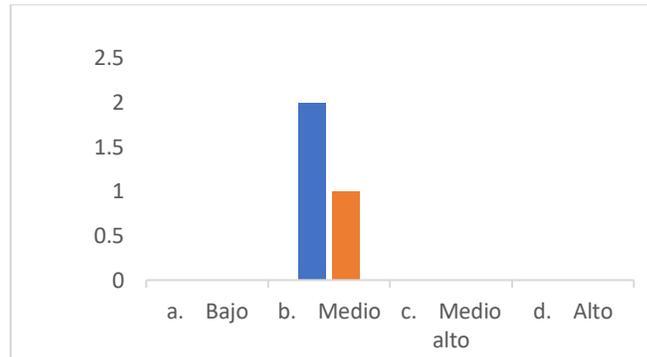

Figure 17. Ease with which students reflect on the author's position.

Source: Authors

From Figure 17, it can be observed that 100% of the students reflect on what they read in the middle grade, which shows that in the reading process, the students can reflect on the basic elements that structure the content of the topic.
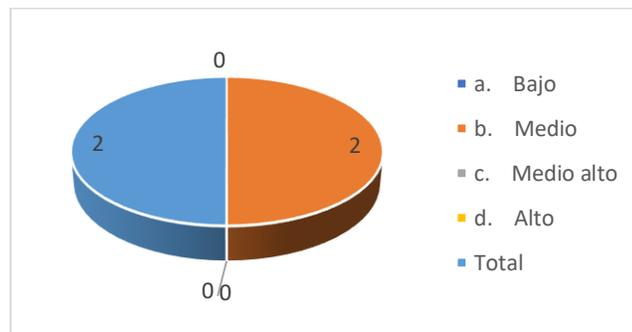

Figure 18. Degree to which students comprehend what they read.

Source: Authors

In relation to Figure 18, it is identified that 100% of the students maintain a good comprehension of the texts or stories read, while the low, medium-high and high grades presented 0%. That is to say, the reading process should be taken advantage of in elementary school students in order for them to develop the competencies of critical analysis and comprehension of the text read.

Figure 19. Degree to which students comprehend what they read.

Source: Authors

In Figure 19, it can be inferred that 100% of the students relate what was read in the middle grade, while the low, medium-high and high grades presented 0%. These results correspond to the fact that students identify the main elements of the text with the ability to correlate the cognitive object with each of the elements of their environment.
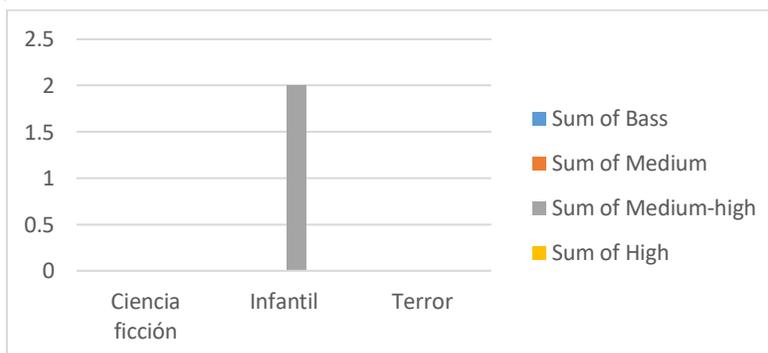
2. Sociocultural factors

Figure 20. Type of reading that students read in the classroom.

Source: Authors

From Figure 20, it can be seen that 100% of the students prefer the children's type of reading. However, this reading has a medium-high valuation. Likewise, it was identified that they do not like horror and science fiction readings.
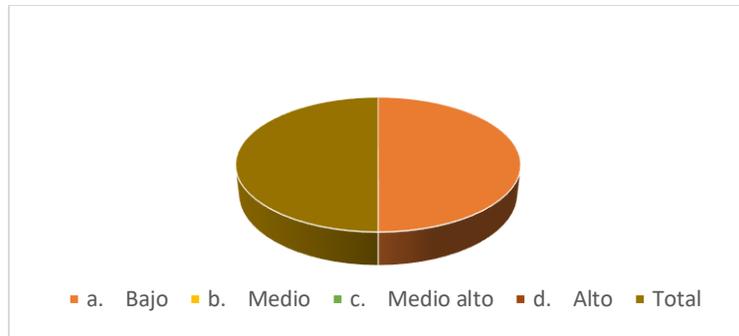
Figure 21. Socioeconomic status of students.

Source: Authors

Figure 21 shows that 100% of the students belong to a low socioeconomic stratum, which correlates with economic difficulties and a lack of resources (materials) to support the reading process at home.
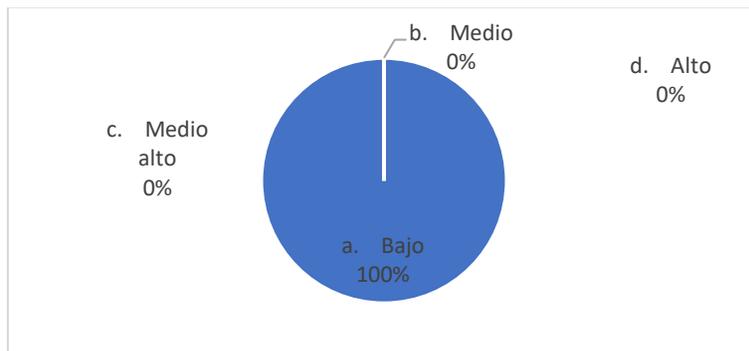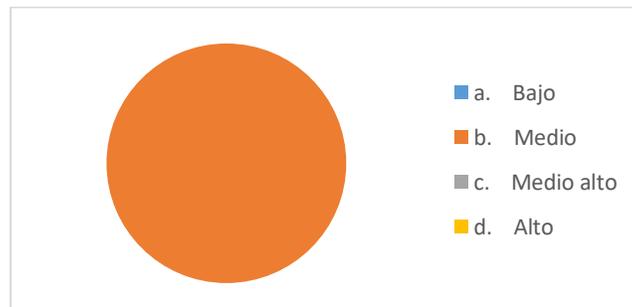

Figure 22. Parental support in the reading process of students.

Source: Authors

This result is related to the deficiency in reading comprehension that is not reinforced at home by the parents, making it even more difficult for the student to improve the reading process.

Graphic 23. Motivation of students in school to read.

Source: Authors

Figure 23 shows that 100% of middle-grade students are motivated to read at school due to the scarcity of adequate resources-materials, conditions of favorable spaces to encourage reading at school and the lack of implementation of didactic methodologies supported by information technologies that motivate the reading process at school.
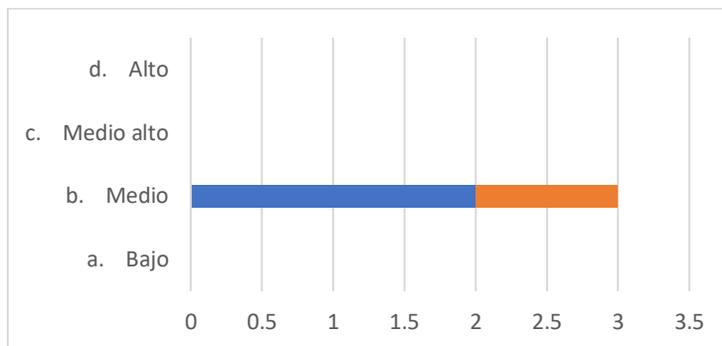

Figure 24. Apathy of students in school to read.

Figure 24 shows that 100% of the students in the middle grade find reading apathy in school. This result is related to the answer given by the students in Table 23. This confirms that students do not have the minimum resources such as children's stories, texts, magazines and newspapers to support reading in class and at home.
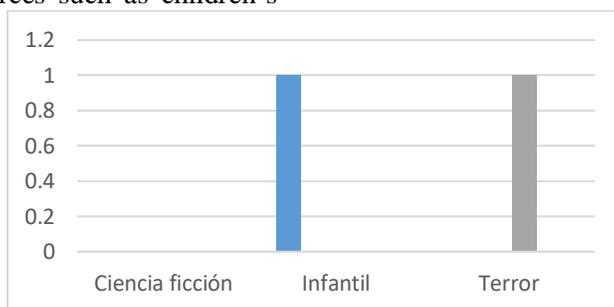

Figure 25. Does the school keep the different types of stories up to date?

From Figure 25, it is possible to identify the type of reading that elementary school students of the rural IE keep updated are horror books, with quantities between 1 and 10 books; in the second order, there is children's literature which ranges between 21 and 30 books. The permanence of these books in the library is related to acquisitions and some donations are given to the school.
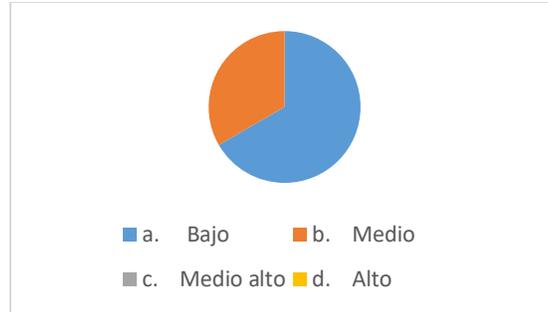
Figure 26. Degree to which students describe what they read

Source: Authors

From Figure 26, it can be interpreted that students describe what they read in middle grade 33%, and another percentage describes the characters and objects represented in the reading in low grade 67%. The above strengthens the weakness shown by the students for the interpretation of the characters and objects involved in the text read.
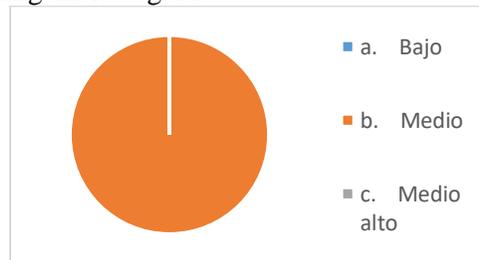

Figure 27. Degree to which students interpret narrative texts.

Source: Authors

About Figure 27, it can be inferred that students interpret narrative-type texts in middle grade 100%. That is, they can identify the tenses and narrate with facts, chronologies and identification of the main characters in a clear way in the reading.

Figure 28. Degree to which students like to dramatize what they read.

Source: Authors

Figure 28 shows that students share the same percentage of 50% for both the middle and lower grades, i.e., students do not like the activities represented in the dramatization of stories or texts read in the classroom.
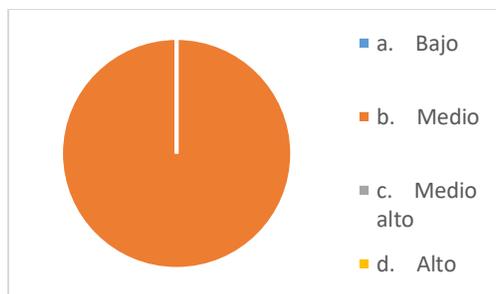
Figure 29. Degree to which learning spaces are necessary to develop reading skills.

Source: Authors

In relation to Figure 29, it was possible to identify that learning spaces to develop reading skills in elementary school students of the rural IE are highly required since they constitute a valuable resource to provide the basic conditions required by students to improve reading comprehension processes in the classroom.

Also, in Figure 30, it was identified that the aspects that showed the greatest difficulty for the internalization of the texts read correspond in the first place to the medium passion shown by the students for reading with 50%, followed by low comprehension, lack of knowledge of the techniques that help improve the reading process with equal numbers of 25%, respectively.
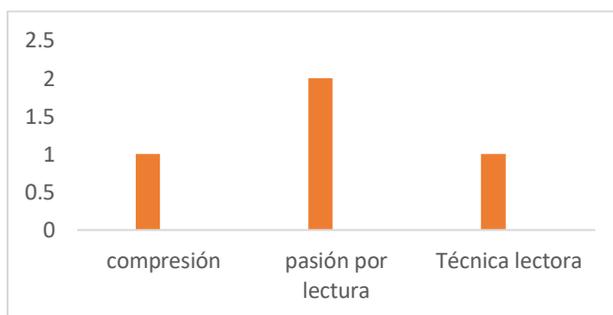

Figure 30. Aspects with greater difficulty in reading in the student.

Source: Authors

Figure 31. Type of materials used in reading didactics.

Source: Authors

Regarding Figure 31, it could be observed that the materials used in the didactics of reading correspond to books and pamphlets in a medium grade; that is, despite being considered by the teachers for the reading process, they are insufficient and awaken low interest in reading in

the students. Other materials, such as newspapers and general interest library books, were not considered to support reading in the classroom.
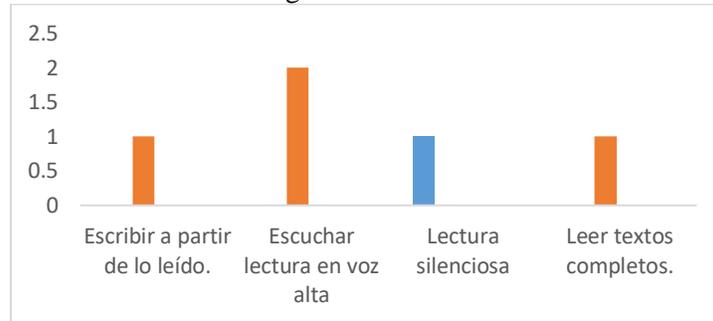

Figure 32. Activities that develop reading comprehension in students.

Source: Authors

In relation to Figure 32, it can be seen that the activity of *listening to silent reading* supports the reading comprehension process in the middle grade with 40% of the elementary school students of the rural IE, followed by the activities of *writing from what has been read and reading the complete text*, with percentages equal to 10%, respectively.

In the case of the activity related to *silent reading*, it was identified that it is applied by 10% of the students, which correlates with the weak reading comprehension of the students under study.
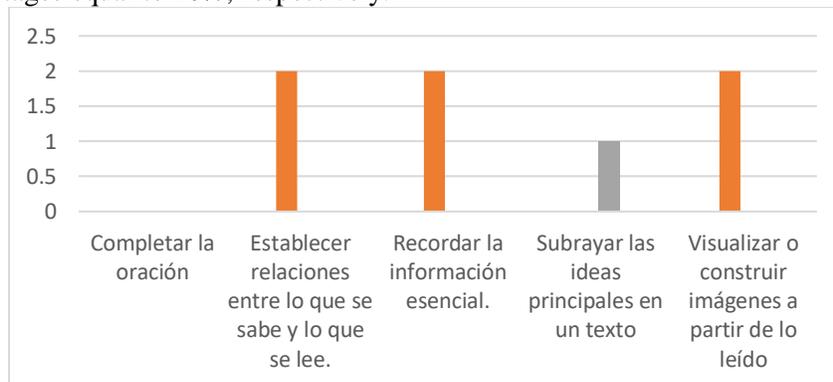
Figure 33. Strategies used to promote reading in students.

Source: Authors

The results of Figure 33 show that the strategies promoted for the improvement of the reading process with beneficial results in a medium grade are related to *establishing relationships between what is known and what is read*, *remembering essential information and visualizing or*

constructing images from what is read, followed by the strategy of *underlining the main ideas in a text*, which was rated in a medium-high grade.

3. Technological factor

Figure 34. Use of Tics to motivate the taste for reading.

Source: Authors

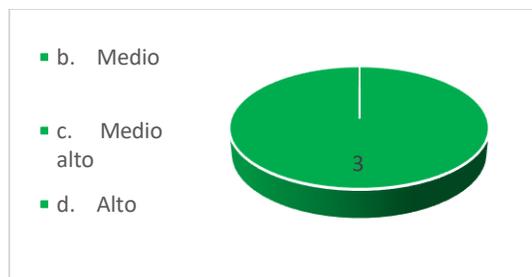Figure 34 clearly shows that the use of information and computer technologies stimulates 100% (high degree) of motivation in elementary school students of the rural IE to help improve the reading process since it allows a dynamic, interactive and participatory process in which students learn to read while playing.
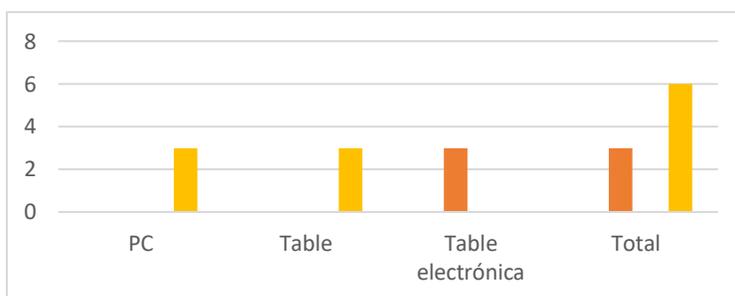

Figure 35. Technological tools to support the reading process

Source: Authors

From Figure 35, it is evident that the technological tools most used by both students and teachers to support the reading process in the Castellanos area in elementary school are related to the use of the computer and the laptop, at a high level, since students have access to this technological resource in the computer classroom. Next, using the electronic tablet is considered at a low level, given that the school does not register this electronic resource to support the students' reading and academic formation process.

Conclusions

Based on the results identified in this research and in relation to the factors that affect reading comprehension in the group of students enrolled in elementary school in a rural IE located in the sub-region of Los Montes de María in the department of Bolívar, it is possible to conclude from each of the academic, sociocultural and technological factors evaluated, that 57% of the students with medium evaluation grade, expressed having ease in the interpretation of the texts read, that is, this is related to the reading comprehension in the group of students enrolled in elementary school in the sub-region of Los Montes de María in the department of Bolívar. Furthermore, in the analysis of the academic factor, 57% of the students with medium evaluation grades expressed to have ease in the interpretation of the texts read; that is, this is related to the difficulties (28%) that the students expressed with the interpretation of the text read and its correlation with the existing objects in the surrounding environment. Likewise, students expressed a

preference (45%) for a high degree for reading children's stories, followed by science fiction 30% in the middle grade, and a low degree, for readings with a horror classification.

Regarding the second sociocultural factor, it was identified that 100% of the students belong to a low socioeconomic stratum, which contrasts with the economic difficulties and lack of resources (materials) to support the reading processes at home, deriving this low intensity in reading, difficulty in the students to internalize the texts read, disinterest and deficient comprehension by the reader. In order to support this reading process, it was determined that it is necessary to support activities and techniques that promote the improvement of reading supported by computer information technology, which was expressed as a stimulating factor in 100% (high degree) to motivate and support the interest of elementary school students, the reading processes and appropriation of interpretative, critical and reflective skills about the text read.

In general terms, academic, sociocultural and technological factors have been shown to have a direct impact on the students' reading comprehension; however, even though they like to read and interpret some simple texts, they do not feel motivated and encouraged to do so due to social and economic difficulties, forced displacement, violence generated by illegal armed groups, as well as other difficulties associated with the lack of complementary teaching materials, low commitment of parents in the academic training process of students, among others; as well as other difficulties associated with the lack of complementary didactic work materials, the low commitment of parents in the process of academic training of students, among others, reasons enough to reach the maximum demotivation and disinterest in reading.

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