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Performance of Reading Comprehension in First-Year Students of Higher Education in Health

Desempeño de la Comprensión Lectora en Estudiantes de primer año de Educación Superior en Salud

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ABSTRACT

Introduction: in recent years, it has been evidenced in the university environment that students have difficulties in reading comprehension of different types of texts.
Objective: the objective of this study is to analyze the performance of reading comprehension in 1st year health education students in southern Chile.
Method: the research has a quantitative, non-experimental, cross-sectional and descriptive design approach with a non-probabilistic convenience sampling obtaining a total of 88 students from the careers of Dentistry, Occupational Therapy and Speech Therapy. The LECTUM 7 instrument was applied to assess reading comprehension. The performance of reading comprehension and according to sociodemographic covariates is described.
Results: the results reveal that 65 % of the students present an average performance. Performance was better in explicit reading comprehension than implicit reading comprehension and better in textual comprehension than pragmatics and criticism. Finally, significant differences are evident according to sex and type of educational establishment and a greater trend in the averages by career and age.
Conclusions: these findings emphasize the importance of enhancing implicit, pragmatic, and critical reading comprehension in university health students.

Keywords: Reading Comprehension; Higher Education; University; Health.

RESUMEN

Introducción: en los últimos años, se ha evidenciado en el ámbito universitario que los estudiantes presentan dificultades en la comprensión lectora de diferentes tipos de textos.
Objetivo: el objetivo de este estudio es analizar el desempeño de la comprensión lectora en estudiantes de 1° año de educación en salud en el sur de Chile.
Método: la investigación tiene un enfoque cuantitativo, de diseño no experimental, transversal y descriptivo con un muestreo no probabilístico por conveniencia obteniendo un total de 88 estudiantes de las carreras de Odontología, Terapia Ocupacional y Fonoaudiología. Se aplicó el instrumento LECTUM 7 para evaluar la comprensión lectora. Se describe el desempeño de la comprensión lectora y según las covariables sociodemográficas.
Resultados: los resultados revelan que el 65 % de los estudiantes presenta un desempeño promedio. El Rendimiento fue mejor en comprensión lectora explícita que en implícita y mejor en comprensión textual que la pragmática y la crítica. Finalmente, se evidencian diferencias significativas según sexo y tipo de establecimiento educacional y una mayor tendencia en los promedios por carrera y edad.

Conclusiones: estos hallazgos enfatizan la importancia de potenciar la comprensión lectora implícita, pragmática y crítica en estudiantes universitarios en salud.

Palabras claves: Comprensión Lectora; Educación Superior; Universitarios; Salud.

INTRODUCTION

Facing university life requires the development of various skills, among which reading comprehension is essential for academic success and educational progress.[1] Reading comprehension is understood as a complex process involving different cognitive and linguistic skills and the reader's interaction with the text.[2] This process encompasses graphic perception, sensory representations, and grapheme-phoneme conversion, enabling access to the lexicon and facilitating the acquisition of meaning through mental representations.[3,4,5]

Within reading comprehension, some levels are composed of literal (explicit) and inferential (implicit) levels of comprehension, as well as textual, pragmatic, and critical levels of comprehension.[6,7]

Explicit reading comprehension involves the ability to identify the literal information found in the text, i.e., the student carries out a reconstruction of the text without requiring a very active intervention from the reader's cognitive structure.[7,8,9] Implicit reading comprehension refers to the ability to use logical reasoning to connect prior ideas with new ones through an integrated and schematic mental process in the elaboration of hypotheses and interpretations, which, in some cases, is supported by certain implicit clues present in the text. Therefore, students can decipher hidden messages or double meanings by inferring the author's communicative intention, i.e., hypothesizing and making assumptions about the text they have read.[8,10]

Textual reading comprehension refers to the ability to solve tasks at various levels of textual organization, ranging from individual words to the text as a whole. In this competence, there are four levels of comprehension based on the linguistic structure, including word comprehension (propositional level), sentence comprehension (propositional level), text microstructure (local coherence), and text comprehension (global coherence).[6,11] Pragmatic comprehension is the reader's ability to relate the text to the situational context (the immediate environment, the temporal-spatial framework where the text is produced, transmitted, and received) and the cultural context.[7] Critical comprehension consists of the reader's ability to determine the author's intentions, the ideological, theoretical, or doctrinal perspective from which they write and/or discuss those intentions, to relate the rhetorical-discursive strategies used in the text to the communicative purpose and the context in which the text arises; to apply information from the text to other contexts to solve problems; and to interpret information from the text from a different context.[7,12]

The low performance of elementary and middle school students on national and international reading comprehension assessments is widely acknowledged.[11,13,14,15] Poor results on these assessments indicate a persistent crisis in the fundamental skill of comprehending texts, which negatively impacts overall academic performance and students' ability to process and apply information effectively.

Upon entering university, students are expected to have developed reading skills (explicit, implicit, textual, pragmatic, and critical) sufficient to cope with higher education, as they will be required to engage in comprehensive and essential reading across their various disciplines throughout their university careers. This reading must be done with the aim of constructing new knowledge based on logical judgment, enabling them to solve problems and make informed decisions. Increasingly, however, higher education institutions have noted the difficulties their students face in understanding what they read.[13,14,15,16,17,18,19,20,21,22]

Several reasons may contribute to the low performance in reading comprehension among university students in Chile, including the lack of practice in critical and analytical reading during basic and secondary education.[14,20] Many students arrive at university with low reading skills performance, which directly impacts their ability to understand complex academic texts.[23]

The main research has shown that education students have better performance in textual reading comprehension and poorer performance in pragmatic and critical comprehension.[24,25] Other studies have shown similar evidence regarding better performance in explicit comprehension compared to implicit comprehension, as well as textual comprehension over pragmatic and critical comprehension.[17,26,27]

The reading comprehension of higher education students has been evaluated and related to several socio-demographic factors in some studies. Regarding gender, it has been observed that women perform significantly better than men in reading comprehension skills.[28,29] Regarding the type of educational establishment, it has been demonstrated that the kind of school students attend makes a significant difference in favor of students who participate in private educational establishments.[28,29]

In addition, students in healthcare careers face additional challenges, as their professional training requires a deep understanding of technical and scientific texts, which is crucial for both their academic and professional success.[21] Finally, age is the least studied factor in contrast to the other sociodemographic covariates described, and studies have only been reported at the elementary and middle school level.[15] note that a similar factor is

academic experience, where it has been shown that students with more academic experience perform better in reading comprehension than students with less academic experience.

Given this background, the primary objective of the present research is to examine the level of reading comprehension among first-year students in higher education within the health field in southern Chile. The study aims to assess the reading comprehension levels of first-year students in higher education and to categorize them according to their components.

METHOD

The following research employed a quantitative approach to objectively measure students' reading comprehension skills, allowing for the collection and analysis of numerical data to describe different groups of students according to socio-demographic covariates. The design of this study is non-experimental, cross-sectional, and descriptive, as it seeks to describe the level of reading comprehension at a specific moment in time without manipulating the variables or establishing causal relationships. This study employed non-probabilistic convenience sampling to facilitate data collection in the university context, selecting participants based on their accessibility.

Participants

The inclusion criteria for participants were that they were in their first year of study in the Faculty of Health in southern Chile in 2024 and had signed the informed consent form.

The sample consisted of 88 first-year students from the Dentistry, Occupational Therapy, and Speech Therapy programs at the University of Valdivia. Fifty-six percent of the students were female, and the remaining 44 % were male. Regarding university careers, 40 % belonged to Dentistry, 39 % to Occupational Therapy, and 21 % to Speech Therapy. About age, 28 % are 18 years old, 38 % are 19 years old, 14 % are 20 years old, and 20 % are 21 years old or older. Finally, regarding the secondary education establishments of origin, 72 % came from subsidized or private establishments and 28 % from municipal ones.

Instrument
LECTURE 7

For the evaluation and measurement of reading comprehension skills, the LECTUM 7 instrument was used. This is a test composed of five texts: two argumentative, two expository, and one narrative, accompanied by a total of 50 reading comprehension questions, each worth 1 point. This battery provides a direct measure of reading comprehension based on a quantitative assessment. Additionally, it provides information through the direct scoring of the dimensions of explicit and implicit reading comprehension, as well as the sub-dimensions of textual, pragmatic, and critical reading comprehension.

The LECTUM 7 provides five categories of performance scales, which allow the performance of an individual or a group to be evaluated about a reference population. That is, the interpretation of the score will be differentially associated with the establishment in which the participant studies or has studied (table 1).

Table 1. Reading comprehension performance categories according to LECTUM 7		
Performance categories	**Direct scoring range for municipal establishments**	**Direct scoring range for grant-aided and private establishments**
Very low	0	Minor 4
Low	1-7	4-11
Normal	8-21	12-28
High	22-28	29-28
Very High	Greater a 28	Greater a 36

On the other hand, performance norms were established based on the raw score obtained in the test, its corresponding percentile and standard score, as well as the associated confidence interval, which allows for the interpretation of the results about the standard error of measurement of the instrument.

Although the LECTUM 7 battery has been primarily validated for use with primary and secondary school students, its application in higher education contexts has also been documented. Indeed, Form A of the LECTUM 7 has previously been used to assess the reading comprehension of first-year university students in teaching degrees at the University of Concepción, demonstrating its usefulness as a resource for diagnosing comprehension levels in this age group. Considering that the participants in the present study are in their first year in health careers, and given the absence of standardized instruments for this specific population in Chile, we chose to use the LECTUM 7 as a valid tool to obtain a diagnostic approximation of reading comprehension

performance at this educational level.

Procedure

Firstly, authorization was requested from the Ethics Committee for the collection of data, along with all the necessary documentation. Secondly, the participants signed a physical informed consent form to authorize their participation in this research. Thirdly, the data were collected in person by applying LECTUM 7 to each student, as conducted by the principal investigator, in the University's computer laboratories. Fourthly, the data from the LECTUM platform was stored and transferred to a single USB drive by the thesis researcher in charge to protect the confidentiality of the participant's data. It should be noted that each participant was registered with an anonymous ID. Finally, the fifth step involved analyzing the data, constructing tables and graphs, presenting a theoretical discussion, making projections, and drawing conclusions.

Data analysis

Firstly, descriptive statistics were performed considering the total direct test score, explicit and implicit dimension scores, and the textual, pragmatic, and critical sub-dimensions of reading comprehension (table 2).

Secondly, descriptive statistics are presented for the LECTUM 7 instrument's direct reading comprehension score about the sociodemographic covariates gender (male vs. female), type of educational establishment (municipal vs. private subsidized), university degree (dentistry vs. occupational therapy vs. speech therapy) and age (18 years vs. 19 years vs. 20 years vs. 21 years or older).

To analyze the main effect of the variables, separate analyses were performed for non-parametric data (Shapiro-Wilk $p < 0,05$). The Mann-Whitney U test was used to assess the sex variable (male vs. female) and separately the type of educational establishment variable (municipal vs. private, subsidized). The dependent variable was the LECTUM 7 test score.

A Kruskal-Wallis test was performed to evaluate the variables of university degree (Dentistry, Occupational Therapy, and Speech Therapy) and age (18 years, 19 years, 20 years, 21 years or older). The dependent variable was the LECTUM test score.

SPSS and JAMOVI statistical software were used to process, describe, analyze, and contrast the information obtained.

RESULTS

Internal reliability of the LECTUM 7 instrument

Although the primary purpose of this study is not to validate the LECTUM 7 instrument, it was considered pertinent to report the internal reliability of the test used, given its application to a population other than the one for which it was initially designed. In this sense, an internal consistency analysis was conducted, yielding a Cronbach's Alpha coefficient of 0,814 and a McDonald's Omega coefficient of 0,864 for the total scale, indicating good internal reliability. Furthermore, when analyzing each dimension of the instrument, acceptable values are observed for most of the subscales, with the critical dimension ($\alpha = 0,842$; $\omega = 0,885$) and the pragmatic dimension ($\alpha = 0,831$; $\omega = 0,875$) standing out. These results support the use of the LECTUM 7 as a valid tool to obtain a diagnostic approximation of reading comprehension level in first-year higher education students, especially in contexts where there are no specific standardized instruments for this population.

Reading comprehension performance in first-year students

The sample consisted of 88 first-year students from the Dentistry, Occupational Therapy, and Speech Therapy programs at a university in Valdivia. However, data from 8 students were excluded due to incomplete responses on the instrument, leaving a total of 80 students, i.e., 91 % of the participants.

Figure 1 illustrates the distribution of students according to their reading comprehension performance, categorized into three groups: low, normal, and high, based on the criteria of the LECTUM 7 instrument.

Out of a total of 80 students, 40 are in the normal category, 30 are classified in the low category, and 10 reach a high level of performance.

Regarding the percentage performance of the students, 35 % have a low performance in reading comprehension, while 50 % have a normal performance, and 15 % have a high performance (figure 1).

Table 2 presents the descriptive statistics of students' performance on the different dimensions and sub-dimensions of reading comprehension.

The direct reading comprehension score obtained a mean of 15,8 with a standard deviation (SD) of 8,1, indicating a wide dispersion of results within the sample.

The results show that students perform relatively better in the explicit and textual dimensions, while the implicit, pragmatic, and critical dimensions have the lowest scores. This suggests that, although students manage to identify and organize explicit information, they face significant difficulties in interpreting, contextualizing, and critically analyzing the content of texts.
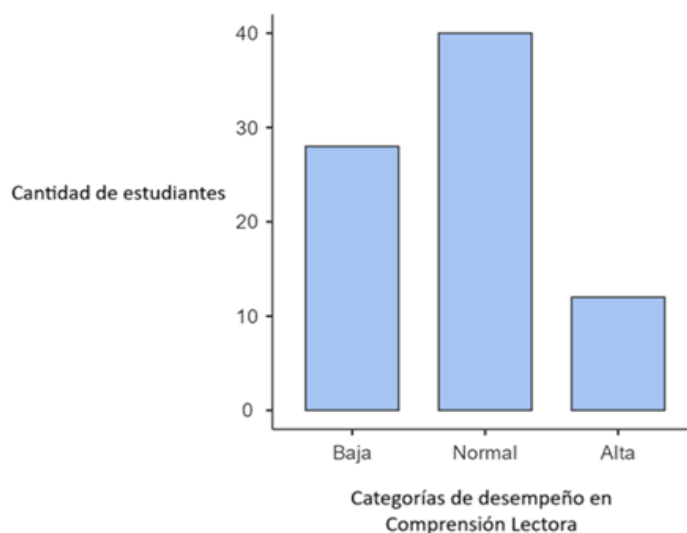
Figure 1. Reading comprehension performance according to LECTUM 7

Table 2. Descriptive statistics of the dimensions and sub-dimensions of reading comprehension in 1st-year university students with details of mean, standard deviation (SD), standard error (SE), median, mode, variance, minimum (Min), and maximum (Max)

Dimensions and sub-dimensions of reading comprehension	Media-(DE)	EE	Medium	Fashion	Variance	Min-Max
Direct score	15,8 – (8,1)	0,90	14	10	66,09	2-32
Explicit	10,3 – (5,5)	8,50	8	4	30,31	1-23
Implicit	5,5 – (3,5)	5,00	5	4	12,83	0-14
Textual	12,9 – (6,9)	12,00	12	0	48,62	2-26
Pragmatic	1,5 – (1,2)	1,00	1	0	1,53	0-4
Critical	1,16 – (0,9)	1,00	1	0	0,89	0-4

Table 3 presents the descriptive statistics of the direct reading comprehension score about gender. The data reveal differences in reading comprehension performance between males and females.

Regarding the variable type of educational establishment of origin for the students, there is a tendency towards better performance in reading comprehension among students from subsidized or private educational establishments compared to those from municipal ones.

Regarding the descriptive variables of the career variable, a trend is observed in the mean scores of students in Speech Therapy compared to those in Dentistry and Occupational Therapy.

Regarding the age variable, there is a trend towards a higher average score for students aged 21 or older compared to those aged 18, 19, and 20 (table 3).

Table 3. Descriptive statistics of direct reading comprehension scores according to gender (males vs. females), type of educational establishment of origin (Municipal vs. subsidized private), university degree (Dentistry vs. Occupational Therapy vs. Speech Therapy), and age (18 years vs. 19 years vs. 20 years vs. 21 years or older) with details of mean, standard deviation (SD), standard error (SE), median, mode, variance, minimum (Min) and maximum (Max)

Variables	N	Media (DE)	EE	Medium	Fashion	Variance	Min-Max
Sex							
Men	35	13,1 – (8,32)	1,41	11	10	69,2	2-32
Women	45	18,0 – (7,39)	1,10	19	24	54,6	3-29
Type of Educational Establishment							
Municipal	28	12,8 – (8,43)	1,59	12	3	71,0	2-28
Subsidised or private	52	17,4 – (7,56)	1,05	15	10	57,2	6-32
University degree							
Dentistry	32	15,6 – (8,00)	1,52	13	8	74,1	2-29
Occupational Therapy	31	15,2 – (7,81)	1,41	13	12	62,1	2-29
Speech therapy	17	17,2 – (7,95)	1,93	16	16	63,3	5-32
Age							

18 years	23	14,5 – (8,06)	1,68	13	18	65,1	2-32
19 years	30	16,5 – (8,82)	1,61	14	11	77,8	2-29
20 years	11	14,3 – (4,73)	1,42	15	15	22,5	9-24
21 years	16	17,3 – (8,92)	2,23	20	20	79,7	3-29

When comparative analyses were performed on the variables, several statistically significant results were found (table 4). Regarding the gender variable, a substantial effect on the total direct score was observed ($p = 0,015$). A trend is observed in the mean towards better reading comprehension performance among female students compared to male students. The main effect was also significant for the explicit ($p = 0,019$) and implicit dimensions ($p < 0,001$), with the same trend of benefit for females. In the observation of subdimensions, the effect was significant for textual ($p =0,005$) and critical ($p =0,012$) subdimensions but not for pragmatic subdimension.

Table 4. Comparison of the dimensions and subdimensions of reading comprehension between the covariates: gender (males vs. females), type of educational establishment of origin (Municipal vs. subsidized private) using the Mann-Whitney U test and the Kruskal-Wallis test, for the variable university degree (Dentistry vs. Occupational Therapy vs. Speech Therapy) and age (18 years vs. 19 years vs. 20 years vs. 21 years or older)

Dimensions and sub-dimensions of reading comprehension	Sex		Type of educational establishment		University degree		Age	
	U	*p* valor	U	*p* valor	X^2	*p* valor	X^2	*p* valor
Direct score	474	0,015*	474	0,010*	0,879	0,644	8,71	0,560
Explicit Dimension	493	0,019*	493	0,017*	0,482	0,786	8,77	0,554
Implicit Dimension	530	<0,001*	530	0,044*	3,636	0,162	10,23	0,420
Textual Subdimension	463	0,005*	463	0,006*	0,143	0,134	9,70	0,467
Pragmatic Subdimension	494	0,261	494	0,018*	4,020	0,931	7,45	0,682
Critical Subdimension	489	0,012*	489	0,011*	1,467	0,480	10,78	0,375

Concerning the type of school variable, a significant effect on the total direct score was observed ($p = 0,010$). A trend can be observed where students from subsidized or private educational establishments present higher performance in reading comprehension than students from municipal educational establishments. The main effect was also significant for the explicit ($p = 0,017$) and implicit dimensions ($p < 0,044$), as well as for the sub-dimensions: textual ($p = 0,006$), pragmatic ($p = 0,018$), and critical ($p = 0,011$).

About the variable university degree (Dentistry vs. Occupational Therapy vs. Speech Therapy), there was no significant effect on the total direct score or for any of the dimensions or subdimensions.

Regarding the age variable, the results of the Kruskal-Wallis test on the evaluated dimensions and sub-dimensions indicate no significant effect. This suggests that reading comprehension performance is similar among students of different ages.

DISCUSSION

This research analyzed the level of reading comprehension among first-year students pursuing healthcare careers in southern Chile. To this end, reading comprehension performance was described in its explicit and implicit dimensions, as well as in its textual, pragmatic, and critical subdimensions. In addition, it was observed that these dimensions and subdimensions vary according to the socio-demographic characteristics of the students, such as gender, type of secondary school, university career, and age.

According to the categorical interpretation of the LECTUM 7 instrument, 35 % of the students demonstrated low performance in reading comprehension, while 50 % showed normal performance, and 15 % exhibited high performance.

Regarding the statistical data, the students presented a mean of 15,8, which suggests that the average reading comprehension level of the students tested is statistically low compared to the total score of the instrument. This may have consequences for students' academic performance and educational trajectory, as well as for the quality of their learning.[23] These results are consistent with other studies where, despite the assumption that university students enter university with a consolidated reading competence, several studies suggest that many of them face difficulties in comprehending complex academic texts, especially in the first years of university education.[11,16,18,21]

According to the dimensions of explicit and implicit reading comprehension, students performed better in the explicit dimension, a finding that has been reported in other studies. Specifically, students demonstrated stronger performance in explicit reading comprehension compared to implicit reading comprehension. [17,21,24,25,26,27] This is explained by the fact that explicit reading comprehension consists of identifying the literal information found in the text; that is, the student performs a reconstruction of the text without an active

intervention during reading. Therefore, it is much more accessible for the reader to understand the text by locating and identifying the linguistic elements within it.[7,8,9] However, implicit reading comprehension presents greater challenges for students because it requires the ability to use logical reasoning and connect it with previous ideas to generate new schemas, hypotheses, and implicit interpretations of the text. Therefore, it is inferred that students present greater challenges in deciphering the linguistic elements present in a text and making assumptions about what they have read.[7,8,9]

Regarding the subdimensions of reading comprehension, students performed better in the textual subdimension than in the pragmatic and critical subdimension, which indicates that students performed better in recognizing the structure and internal coherence of the text, which is consistent with what has been reported in other research, where students performed better in textual reading comprehension than in pragmatic and critical reading comprehension.[17,21,24,25,26,27] This can be explained by the fact that explicit reading comprehension is the basis of textual reading comprehension, as the reader must use the clues provided by the text to derive the meaning found within it, thereby understanding the macro and micro types of coherence that structure the text.[7]

The pragmatic subdimension obtained low average scores, which reflects difficulties in understanding the context and the communicative intention of the text, and the critical subdimension presents the lowest performance, which indicates a low level of ability to analyze and critically evaluate the textual content; this is directly related to what has been established in other studies where students had difficulties in analyzing the situation models and prior knowledge of pragmatic and critical reading comprehension.[17,21,24,25,26,27]

One of the reasons for this low performance can be attributed to their poor performance in implicit reading comprehension, as implicit reading comprehension forms the basis for pragmatic and critical reading comprehension. On the one hand, pragmatic reading comprehension refers to the reader's ability to relate the text to the context of the situation and the broader cultural context. In this case, the students had difficulties recognizing the communicative process of the text and situating it about its social function.[7] On the other hand, critical reading comprehension allows the reader to establish a critical relationship with the text and its context, determined by the author's intentions and ideological, theoretical, or doctrinaire perspective. Therefore, the students had difficulty applying the information in the text to other contexts in order to solve problems and interpret the information in the text from a different perspective.[7,12]

In the results obtained regarding the relationship between socio-demographic covariates and the reading comprehension variable, significant differences were observed according to sex and type of educational establishment, as well as statistical trends in career type and age.

Regarding gender, females significantly outperform males in the direct score, explicit, and implicit dimensions, as well as textual and critical subdimensions, with a 95 % confidence interval, exhibiting variations that suggest a greater ability in specific reading skills. The findings of this study corroborate those of other studies, which provide evidence of higher reading comprehension ability in female students in higher education compared to male students,[28,29] with female students consistently outperforming male students. This can be explained from different perspectives, including cognitive, emotional, and social characteristics, as well as contextual factors within the educational environment.

According to [30] women tend to develop greater self-regulation skills for learning, which include strategies such as planning, monitoring, and self-reflection during learning processes. These skills are fundamental for adequate reading comprehension, as they enable female readers to actively analyze and process the information in the text, make inferences, and relate the content to their prior knowledge.

Regarding the type of educational establishment, students from subsidized or private institutions obtained better results than those from municipal institutions. These differences are observed in the direct, explicit, implicit, textual, pragmatic, and critical dimensions of reading comprehension, with a 95 % confidence interval. This could suggest a connection between the type of educational institution and the development of specific reading skills. These results are directly related to other studies, which indicate that students from subsidized or public schools generally have better reading comprehension levels.[28,29]

In Chile, several MINEDUC reports have revealed significant differences in the academic performance of students based on the type of educational institution. Generally, students from private and subsidized schools obtain better results in standardized tests, such as the SIMCE and the Higher Education Access Test (PAES), compared to those from municipal schools. However, these differences are strongly influenced by the socio-economic level of families, as this largely determines access to better educational resources and an environment that fosters more effective learning.[3] It should be noted that although differences in academic performance by type of school are evident, they are deeply intertwined with socioeconomic and structural factors, which suggest the need for more specific studies to delve deeper into these factors.

According to university degrees, a higher average tendency in reading comprehension was observed for students of Speech Therapy than for those of Dentistry and Occupational Therapy in the direct score, explicit, and implicit dimensions, as well as the textual, pragmatic, and critical subdimensions. These results suggest

that reading comprehension may vary considerably between different university courses. It has been shown that the major may have an impact on students' reading performance, as was the case in their study with the subjects tested; however, in both cases, no significant differences were found.[11]

Regarding age, although there is a tendency for students aged 21 or older to have higher average scores than students aged 18, 19, and 20, there are no significant differences.

Finally, these findings regarding the relationship between the reading comprehension variable and the sociodemographic covariates underscore the need to enhance reading training for university students, particularly in fields that necessitate critical reading and analysis of specialized information.

It is essential to consider the limitations of this study, as the small sample size restricts the possibility of generalizing the results to a broader population of university students. It is suggested that the research be replicated in a larger sample that includes students from different degrees and/or universities.

CONCLUSIONS

In conclusion, the study reveals that first-year students in the health area exhibit a lower-than-expected average level of reading comprehension, with only 65 % of students demonstrating high and normal performance, which could impact their academic performance and learning quality.

Students showed a better performance in the explicit dimension and the textual subdimension, which indicates a greater facility in identifying explicit information and recognizing the structure and internal coherence of the text. However, they showed lower performance in the implicit dimension and the pragmatic and critical subdimensions, reflecting difficulties in contextual interpretation and critical evaluation of content.

In terms of socio-demographic covariates, the results indicate that females outperform males in reading comprehension performance. In addition, students from subsidized or private schools obtained better results than those from municipal schools, which is directly related to the educational establishment system in Chile, where better performance is expected from students in subsidized or private schools. It is also observed that students of Speech Therapy tend to have better reading comprehension performance compared to students in other health careers, suggesting that specialization may influence reading performance. Similarly, the covariate age showed a trend toward higher average reading comprehension in students aged 21 years or older compared to other age groups. However, neither covariate (career and age) showed any significant differences in any of the dimensions or sub-dimensions of reading comprehension.

These results underscore the importance of enhancing reading comprehension at the university level, particularly in the skills of implicit, critical, and pragmatic analysis, which are crucial for navigating academic and professional texts in the field of health. The analysis of these variables should enable institutions to adjust their pedagogical practices, thereby strengthening the reading skills of their students and facilitating their educational and professional careers.

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CONFLICT OF INTEREST

There are no conflicts of interest on the part of the authors.

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