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Needs Analysis of Chilean Students of Dentistry for Dental English Course Development

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Abstract

The purpose of the study is to determine the necessity for a Dental English course in the dentistry degree program at the Universidad Autónoma de Chile. To achieve this objective, the target needs analysis instrument developed by Hutchinson and Water (1987) was adapted and distributed to 91 dentistry students and 35 of their teachers in order to determine the students' necessities, lacks, wants, expectations, preferred style of learning and teaching, and interest in the English for Dentistry course. For the quantitative data analysis, descriptive statistics were utilized, while thematic analysis was adopted for the qualitative data analysis. The results indicated the perceived importance of English is related to studying dentistry in their program and practicing dentistry in their future careers as dentists, the sense of lack is demonstrated in the inadequacy of English learning courses in their program curriculum as well as their current low level of English proficiency, and the need to focus on reading, writing, and vocabulary skills in order to write and read research articles in English. The study recommends implementation of a comprehensive branch of English language instruction that include English for General Purposes and English for Specific Purposes, such as English for Dentistry, English for Dental Consultation, and English for Writing Research Articles.

Keywords: Needs Analysis, Dentistry English, English for Specific Purposes, Chile; English for General Purposes

1. Introduction

Dental schools around the world have commenced considering and even adopting curriculum revisions, evaluations, and development in response to the ever-changing needs of society (Crawford et al., 2007; Rodis et al., 2014). In Chile, where medicine and dentistry are taught exclusively in Spanish, several universities are modifying their curricula to increase the employability of their students by integrating English for Specific Purpose (ESP). The modification is occurring despite the absence of a specific policy for the implementation of English for Specific Purpose (ESP) or English for Academic Purposes (EAP) in the country's higher education. Thus, English has become an essential component of the curricula of a variety of professional degree programs. In the case of Business Administration degree programs, the majority of programs have added Business English to their curricula from the first to the third or fourth year of study with the goal of enhancing the interprofessional business skills of students for the globalized economy (Lu, 2022). In the case of dentistry, there is no reliable proof or report about how English is used in Chilean universities for dentistry.

Need analysis is central to the entire discourse of ESP. It refers to the techniques for acquiring information about learners for use in curriculum development (Nunan et al., 1988). In order to build a future foreign language training approach, the process takes into account the specific goals for which the learner will use a foreign language, as well as the learner's current and desired level of proficiency (Ellis & Johnson, 1994). The model of need analysis suggested by Hutchinson and Waters (1987) is the most influential. They divided needs into two categories: Target needs and Learning needs. They articulated target needs in terms of necessities, lacks and wants. Necessities are what the learners have to know to function effectively in the target situations. The concept of Lack refers to the gap between the learner's current knowledge and the knowledge he or she will need in the future. Wants indicate what the student desires to learn, which may or may not be compatible with how the course has been constructed. Even if their departments only require them to be proficient in reading and writing skill, students may choose to focus and improve only their speaking skill. This learning-centered method developed by Hutchinson and Waters (1987) is widely used by academics because it offers numerous benefits, such as providing constant, systematic assessment of students' needs with the aid of interviews, surveys, questionnaires, and observations. In addition, this strategy involves the utilization of authentic materials to enable students to comprehend the original texts of their academic discipline. Lastly, Hutchinson and Waters (1987) stress the importance of using different ways to gather data to meet the complex needs of target groups.

In the field of dentistry, need analysis has been used to produce English materials and curriculum for English dentistry courses in contexts such as Indonesia (Zulkarnain, 2019), Japan (Rodis & Locsin, 2019) and Iran (Shamsabadi & Eslami Rasekh, 2014). The proliferation of this concept stems from the fact that English has long been the common language of the international scientific community for dentists

and future dentists. Thus, international intellectual exchanges are conducted in English through collaborative research, conferences, and scientific gatherings (Rodis et al., 2019). The authors claim that crucial innovative practices in medicine and dental fields can only be read in journals and books written in English. Since the majority of textbooks in Chile are written in Spanish, the primary objective of ESP courses offered in the majority of universities focuses on enhancing reading proficiency in English and translating texts pertinent to their professions into Spanish. Moreover, the purpose of English classes is to prepare students to improve their academic understanding and employability after graduation by enhancing their capacity to acquire more technical vocabulary in their respective disciplines. Given that Chilean teachers of English are only trained to teach General English at the elementary and secondary levels, it has been difficult to establish a successful ESP course at the university level. Additionally, due to the lack of policy needed to govern ESP courses in higher education, the majority of academic discussion on ESP in Chile occurs at the secondary education level (Zúñiga et al., 2019; Aguilar et al., 2017). In other words, little is known about the design of ESP in Chilean universities. Similar to the situation in Iran, the marginalization of English for Academic Purposes (EAP) and English for Specific Purposes (ESP) as developing branches of EFL instruction has resulted in a lack of motivation and effort among undergraduate students to communicate in professional and academic contexts, particularly in international settings (Shamsabadi & Eslami Rasekh, 2014). In order for Chilean students and professionals to be competitive with their counterparts from other countries, it is crucial to build an ESP course structure that is tailored to their interests and needs. Even though numerous studies have been conducted on the ESP learning necessities, wants, and lacks among students of dentistry in various contexts (Zulkarnain, 2019; Rodis & Locsin, 2019), no research has been conducted on this topic in Chile. In order to fill this gap in the literature, this study seeks to undertake a needs analysis of dental English among undergraduate students of dentistry in Chile. The selection of dentistry is grounded on the exponential expansion of dental degree programs in Chilean universities (Cartes-Velasquez, 2013). This research will provide English teachers and educational policy makers with suggestions for developing their English for Dentistry curriculum to match the objectives and aims of their institutions and students. By examining the lacks, wants, and necessities of dental English from the perspectives of students and their instructors, attempts were made to answer the following question: What are the lacks, necessities and wants of Dentistry English among Chilean dental students?

2. Conceptual Framework of Needs Analysis

We argue that the term "necessities" is one of the most essential concepts to identify the target needs for studying dentistry and develop its syllabus. This term helps to determine the demands of the situation with respect to what our dentistry students have to know in order to function effectively in the target and learning situation. For example, learning situations need to involve exploring language learning skills (reading, listening, writing, and speaking) and the target situation needs as related to learning dentistry and their future professional career. Lacks, on the other hand, are the gaps between what the learners have already acquired and what they still have not acquired but need in order to achieve the target functional communicative competence. This involves assessing their current level of English and their attitude towards learning the language; challenges faced when learning the language; and the availability of English teaching courses as well as adequate resources in English and textbooks that are translated into Spanish. Lastly, Wants, as the third component, are the subjective perceptions of the learners regarding their needs. In other words, it is possible that the learners will have their own views, which might be in conflict with the perceptions of other interested parties like the ESP practitioner and teachers. Thus, when designing a course, it is necessary to consider and analyze the opinions of the learners (as the final destination) along with other related opinions by exploring their desire to take a dental English course and how they prefer to study the course to foster motivation among the students. They should also decide on the pedagogical approach, the medium in which the course should be taught, and the type of material their teachers should use, as well as the duration of each class in the course. As shown in Figure 1, this conceptual framework is constructed based on the initial concepts of Hutchinson and Waters (1987) adapted to conduct needs analysis on the needs of ICT-based English for nursing students (Arroyyani & Nurhayati, 2019).

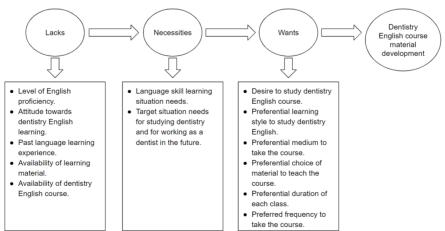


Figure 1. Hutchinson and Waters (1987) Needs Analysis Model. Adapted from English for Computer Science: Students' needs to enhance technical writing at Tlemcen University by Kourichi & Benyelles, 2019

3. Methodology

Research design

The primary goal of this study is to examine the English language requirements of dental students at the Universidad Autónoma de Chile. An effort was made to find English-language-related activities and abilities that dentistry students could use in their academic work and future careers. In order to accomplish this, a survey method was employed to generalize from a sample to a population so that inferences could be made about some characteristics and attitudes of the target population. Consequently, the use of multiple methods was deployed since it allows the researcher to view the subject from a variety of angles and comprehend it in a more thorough and comprehensive way (Morse, 2003). This was necessary for the researcher to gather data from many perspectives in order to evaluate the English language needs of the dental students (students and teachers).

Participants and Context

This study included dental students in their first, second, third, fourth, fifth, and sixth years of study, as well as their teachers from the Universidad Autónoma de Chile. This university was chosen as institutional subjects because it is the only institution in the region whose curriculum does not contain English for Dentistry. The suggestion of AQAS (Agency for Quality Assurance), which certifies their degree program, necessitated the development of their English language communication skills. Moreover, ACHEO (Asociación Chilena de la Enseñanza de Odontología) produced a formal document emphasizing the significance of teaching future dentists on how to communicate with patients from diverse cultural backgrounds and foreign languages. The sample was screened using a convenience sampling system, which allows both students and teachers to participate in this study. All of the participants fell within the age range of 18 to 34. There were a total of 91 pupils, of which 55 were female and 36 were male. Prior to the beginning of their degree program, the majority of respondents had studied general English at the elementary and secondary school levels. At the time of collecting data for this study, it is vital to note that the university attended by the participants does not offer any English courses.

The second group of respondents consisted of 35 dental educators. Their teaching experience ranges from one to nineteen years. The selection of these teachers was based on the fact that they had natural communication with their students. Therefore, they could provide valuable information about their students' English needs and demands. This is critical for course developers because this insightful and discerning feedback will help them develop materials for the proposed course.

Instrumentation and Data Collection

The current study employed a structured questionnaire and a semi-structured interview technique in order to accomplish triangulation and thus obtain accurate data about the needs analysis of English language students majoring in dentistry.

Structured Questionnaire

After studying a variety of research and existing surveys, such as Hutchinson & Waters (1987), Yulia & Agustiani (2019), and Basturkmen (1998), the development of a systematic questionnaire with 37 items was undertaken. The questionnaire contained four distinct components. Section A aimed to collect participants' background information. Section B gathered information regarding the target situation and learning situation requirements for dental English. Section C focused on students' present level of English proficiency, the availability of resources to complete the course, and questions that identified the difficulties students encountered in learning the English language. The fourth section, D, focused on the significance of language skills, grammar, vocabulary, and pronunciation, as well as their preferred teaching style, amongst others.

Semi-Structured Interview Protocol

The second instrument consisted of a semi-open-ended interview protocol for teachers. Teachers were asked four open-ended and three closed-ended questions related to the target and learning situation needs of their students. The interview was utilized to support and/or clarify the results obtained from the questionnaire. The open-ended interview questions asked about the importance of English for future professional practice and studying of dentistry by dental students, the perceived level of students' English, how the course should be taught, and teachers' comments as well as suggestions on how to improve the quality of the dentistry English course.

Data Collection Protocol

To determine the content validity of the questionnaire, it was sent directly to a panel of experts in applied linguistics and dentistry to evaluate the relevancy of the items in the needs analysis questionnaire. Prior to data collection, the questionnaire was piloted with representative samples of the intended respondents, and its items were revised, modified, and improved. To avoid misunderstandings, the questionnaire was translated into the L1 of the participants (i.e., Spanish). The data was then collected retrospectively through an anonymous online survey. The data was collected at the completion of the academic year 2021/22. This is to ensure that all participants can devote their full attention to the study. All research ethics codes for data collection were adhered to, including stating the purpose of the study to informants, notifying them of their ability to decline participation, and describing the low possible risk associated while ensuring maximum respondent confidentiality.

Data Analysis

Using SPSS v25.0, the collected data was analyzed. The findings of the Cronbach's alpha test (0.823) suggested that it was highly reliable. Descriptive statistics were utilized to summarize the responses' patterns (Nitko & Brookhart, 2007). This involves coding the responses of

the participants in order to determine the individual responses for each of the items in the two questionnaires and to provide a concise summary of the findings. The percentage provided information regarding the participants' average level of perception regarding the extent of their difficulties, demands, and desires in relation to the dental English course. For the qualitative analysis, the collected participant data was subjected to theme analysis in order to answer the research question and achieve the purpose of the current study. Our data was encoded manually. We utilized inductive encoding. This includes classifying opinions according to shared themes (Cooper et al., 2012). The themes that emerged were employed to address challenges connected to the investigation's primary objectives.

4. Results

The sample characteristics can be seen in Table 1. It is important to state that the participants' university does not offer any form of English course to the students. However, 15 students claim to have learnt the language at the start of their dentistry program.

Table 1. Participants' sample characteristics

Variables	n (%)	
Sex		
Male	36 (39.1)	
Female	55 (59.8)	
No answer	1 (1.1)	
English level		
Elementary	8 (8.7)	
Basic	41 (44.6)	
Intermediate	32 (34.8)	
Advanced	9 (9.8)	
Expert	2 (2.2)	
Where did you study English?		
I have never study it	2 (2.5)	
Primary school	74 (91.4)	
High School	82 (96.5)	
University	15 (18.5)	
Independent	81 (86.2)	

To determine the level of inadequacy of the course, the lack of dentistry English is explored from different points of view. For example, with respect to the availability of resources, less than 50% of the participants believe that learning materials (listening, writing, and textbooks translated to Spanish) to study dentistry are inadequate. Regarding learners' perception of English language learning difficulty, 56.5% believe that English is not a difficult language to learn. The majority of the participants (53.3%) communicate below an intermediate level of English, and only 20.7% consider their English to be good or excellent. Also, there is a high number of participants that consider their English skills to be poor or very poor in different English language skills, including grammar (59.7%), speaking (54.4%), listening (44.6%), writing (42.4%), and vocabulary (42.4%). Concerning the difficulties encountered in studying dentistry due to a low level of English about dentistry (60.9%), giving answers in English to questions related to dentistry (70.7%), correctly pronouncing dental terminology in English (58.7%), writing a research paper or poster in English on a topic related to dentistry (60.9%). Lastly, 70.7% of dentistry students say that the amount of English instruction they get at their university is not enough to meet their academic and professional needs.

In order to determine needs of learners as far as dentistry English learning is concerned, the majority of the participants feel the need to always or often practice writing (44.6%, 22.8%), reading (38%, 42.4%), and listening (40.2%, 35.9%). As shown in Figure 2, they all agree that speaking, reading, and writing are important for studying dentistry. For example, they report that writing skills is needed for writing basic dental concepts in English, journal publications in dentistry, sharing written ideas with other dentists from other countries, and preparing presentations for a seminar or conference on dentistry. With respect to speaking, the majority need the skill for answering questions at international seminars, discussing with foreign dentists' patient cases or other professional issues, consulting with foreign patients, speaking at an international seminar or conference, and speaking at professional meetings. In the case of listening skills, they are needed to attend courses taught by a foreign dentist, understand videos related to topics related to dentistry on the internet, attend foreign patients, and listen to poster defenses in an international congress. Reading, on the other hand, is perceived by a large percentage to be useful for perusing dental equipment and biomaterial instructions as well as dental website, books and scientific journals. Some of these choices are justified. For example, writing is believed to be important to developing an abstract in English for a research project and reports. Also, it's important to send emails to people in other countries who work in dentistry and to apply for exchange programs or postgraduate programs in English-speaking countries.

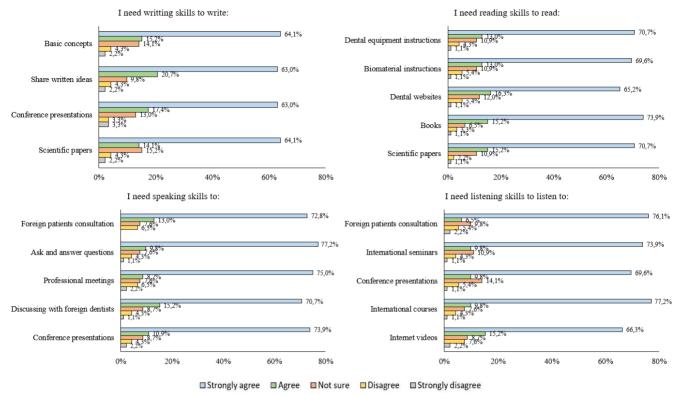
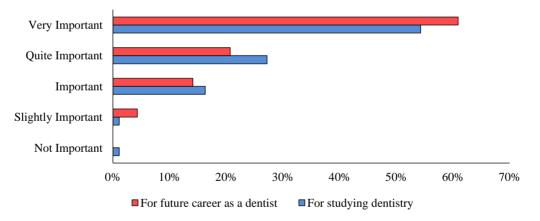




Figure 3 provides the overall perceived needs and importance of English for studying dentistry and future job purposes is very high among the participants.





To determine learners' personal subjective expectations for learning, our findings reveal that the majority of the students want to study dentistry English to succeed in their future career as a dentist (72.8%), for personal interest (66.3%) and to obtain a scholarship for studying postgraduate programs in abroad (65.2%).

Regarding the study method (see Figure 4), the majority would love to learn through memorization and speaking (64.9%), listening (61.7%), and reading (57.4%).

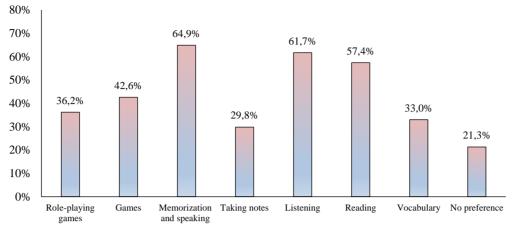
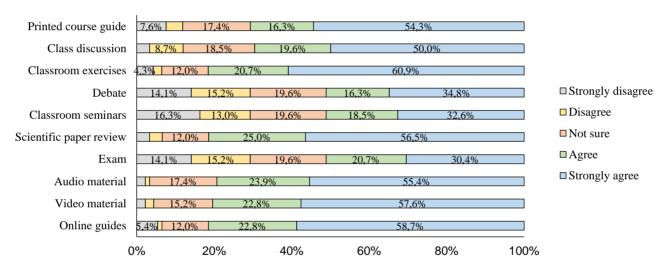


Figure 4. Preferred ways to learn English

Furthermore, in Figure 5, we can observe that the majority want their teachers to use online course guides, classroom exercises, reviews of journal articles, audio materials, video materials, class discussion, and printed course guides to conduct the classes.



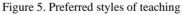


Table 2 presents the summary statistics of how students prefer to learn, their preferred duration for the course, mode of teaching, kind of teacher, and, amongst others.

Table 2. shows an overview of more various wants for learning English

Questions	Respondents' Answers
How do you prefer to learn English for	Most of the respondents prefer to study in small groups (50%) or individually (43.5%),
Dentistry?	and pairs (23.9%).
How long should the English for Dentistry	While 38% of the learners want the course to be offered every semester throughout their
course be offered to students of the career?	six years of study, 27.2% of them want the course to be taught in one semester in the
	second, fourth, and sixth years of the degree program.
How often would you like to study the English	Most reported frequencies and durations "once a week (120-135 minutes)" (35.9%) and
for Dentistry course?	"twice a week (each time 80–90 minutes)" (34.8%).
What kind of teacher of English do you	46.7% prefer to be taught by a native English speaker, while 21.7% do not have a
prefer?	preferential option.
Do you want the English course to be	While 56.5% of the participants want the course to be optional, 39.1% of them want it to
mandatory or optional?	be mandatory.
What is the best mode to teach the English	A large percentage of the learners want the institution to make the course to be taught in
course?	hybrid (46.7%). For the face-to-face mode, 35.9% of them are in favour.
What is the preferred source of material to	The respondents want their source of study material to be both in Spanish and English
learn the English course?	translation (64.1%). However, 33.7% prefer their materials to be only in English.

Qualitative analysis

Some of the reasons given to justify the importance of English include the fact that knowledge of the language opens doors to dental job opportunities and postgraduate study opportunities in other countries. Also, it helps the students study dental materials instructions that are available in English. Thus, they would love to learn dental terminology in English so that they can understand specific vocabulary in dentistry and understand articles that are written in English. Some of their recurring suggestions include providing an incentive for studying the course and developing the course into the basic, intermediate, and advanced structures.

Teachers' view

The majority of teachers (40%) thought their English was intermediate, but they would still like to participate in a special English course for teachers (82.9%). Additionally, they rate (> 90%) the English proficiency of most of their students as being below intermediate level. With respect to skills of importance, many of the teachers agree that the course should emphasize reading of dentistry subjects in English through hybrid mode and that it should be offered every semester throughout the program. Teachers' suggestions include using a diagnostic test to determine and classify students into various levels of English so that the course can be structured according to their level of English. Lastly, it is recommended that a course in dentistry should be taught in English.

5. Discussion

In reviewing the literature, no data was found on the needs analysis of dentistry English among Chilean students of dentistry. Thus, the purpose of this study was to determine the specific English language needs of this group of students by investigating their lacks, desires, and necessities for the Dental English course.

This inquiry helps us to understand the non-existence of dentistry at the institution considered for this study and its negative effect on the learning of dentistry as a degree program. For example, the majority of students believe that the amount of English instruction integrated into the university curriculum is not sufficient. That can be used to explain the unavailability of materials to learn dentistry English, as it is being noted by the participants. However, the students have a good attitude towards learning English because they consider the language to be easy to learn, though the majority of them perceive their English communication skills to be below intermediate level and most of them rate their skills in speaking and grammar as poor. Therefore, considering the established correlation between positive attitude and learning (Elyazale, 2019), it can be argued that the students will have a passion and strong desire to learn dentistry English if the course is eventually integrated into their curriculum. Lastly, the overall challenges faced by the students as a result of the lack of dental English courses include conversing, asking questions, pronouncing terms, and writing articles in English about a dentistry topic. In sum, exploring the dimension of lack in this study is well justified because it provides us with insights on the importance of developing a comprehensive framework to foster dentistry English at the university. Also, considering that the level of English proficiency of the students is low, it can be challenging to introduce dental English directly to them. Thus, it is critical to first foster their general English. As one of the teacher respondents suggested, "a diagnostic course should be conducted so that students should be instructed according to their level of English." This assertion further supports the idea of allowing students to move from English for General Purposes to English for Specific Purposes. The rationale behind this continuum, according to Hutchinson and Waters (1987), is that learners need a good foundation before attempting to accomplish demanding job tasks in a foreign language. Moreover, Dudley et al. (1998) maintains that although English for Occupational Purposes can be taught to beginners, the norm is to wait until they have acquired a basic command of the language if specific work-related goals are to be attained. Moreover, empirical evidence shows that previous knowledge or linguistic competence in general English correlates with the learners' performance in the ESP test (Chostelidou, 2011). These findings further espoused the importance of the concept of lack in helping ESP practitioners and researchers investigate ways to bridge the gap between the target proficiency and the existing proficiency of the learners (Hutchinson & Waters, 1987).

Necessity is a type of need that a learner has to know in order to function appropriately in the target situation (Hutchinson and Waters, 1987). In this analysis, the necessity and importance of English dentistry is established in its relevance to studying dentistry as a discipline and to eventually working as dentists in future. This finding is in agreement with Belkbir's (2019) findings, which showed the goal of the ESP course as a tool to foster effective communication among the students in both academic and professional contexts. In the course of probing the language skill that is more important for the participants and the skill that will demand more of their practice, reading and writing skills are highly selected in both situations. The necessity of reading skills by the teachers is also corroborated by their teachers. Writing skills, on the other hand, are justified for the purposes of writing publications for dental journals, writing a presentation for a dental seminar or conference, sharing written ideas with other dentists from other countries, and writing basic dental concepts that are only available in English. Speaking is considered to be important in studying dentistry but does not need to be done often or always, but it seems to be highly needed for the profession as a dentist in the future because the majority needs it to discuss with foreign dentists about patient cases or other professional issues; speak at professional meetings; answer and ask questions at international seminars; and consult with foreign patients. This finding could be explained by the fact that reading and writing skills are required to learn more about English vocabulary in dentistry. For example, reading (Duff et al., 2015) and writing skills (Jin & Webb, 2021) can be used to focus on and foster the vocabulary of dental concepts in English. On the other hand, since speaking skills are highly needed for occupational purposes when they eventually become dentists, English for dental jobs can be developed to foster students 'oral communication at the workplace, as it is demonstrated in an EOP study (Rodrguez, 2013). The course can help students to conduct activities commonly practiced in the workplace of a dentist.

The learners' own personal, subjective expectations. The participants express these expectations in different dimensions. For instance, they want to study dentistry in English for personal interest, to enhance their employability as a dentist in the future, and to participate in an international exchange program. Concerning personal interests, it can be argued that such interests might have been triggered either in the early years (primary school), in the teenage years (secondary school), or now in their adulthood (university). According to Tin (2013), the source of interest in learning a foreign language is not only the ability to imagine and predict the future, but also the ability to reimagine or revise the past or postdict the past event based on current experience. Many of the participants want to learn dentistry for the purpose of having an excellent career as a dentist. This has been corroborated by several studies whose findings show ESP courses are designed solely to meet students' career-related needs (Spirovska, 2017; Bouzidi, 2009). Similarly, the desire of the students to understand, appreciate, and learn their discipline in English will provide an enabling opportunity to share their knowledge with their counterparts in different English-speaking countries. Consequently, it sparks the desire to study dentistry in English in order to participate in an international exchange program.

Memorization, listening, and writing in groups are preferred learning styles for learners. Probing this style plays a vital role in bridging the gap between their styles and the teachers' teaching styles so that the output of the dentistry course can be maximised. The effectiveness of these learning styles has been established in the studies. For example, memorization has been found to be critical for learning, especially vocabulary (Atay & Ozbulgan, 2007), and listening is important for fostering speaking (Goh, 2013). The desire to practice writing skills as it is being expressed by the participants can be linked to the importance of writing skills cited in the literature (Hyland, 2013). Also, the choice to learn in a group has also been justified considering the fact that it helps to facilitate speaking activities (Agustina, 2022).

The importance of some of the teaching preferences as highlighted by the students has been underscored in previous studies. This includes the use of video presentations to boost learners' motivation in class (Radosavlevikj & Hajrullai, 2019). adoption of discussion to foster speaking skills (Nurmasitah et al., 2018). Interestingly, the students want a course that can enhance their ability to write research articles in English. This is needed by final year students that want to write a mini-thesis as a requirement for graduation and all the students that need to make reference to research publications to complete every task given to them. It is therefore important to develop an English for Academic Purpose to meet these needs by adopting certain methodologies such as genre-based pedagogy (Aleksandrzak, 2018) and Jigsaw (Esnawy, 2016). Regarding the choice of an ESP teacher, the majority prefer native English speakers. Some of their reasons can be attributed to the use of authentic oral language and can provide students with more cultural information about English-speaking countries (Samimy & Brutt-Griffler, 1999). However, since the concept of native-speakerism that promotes the hegemony of the native-speakers over the non-natives has been debunked (Tsuchiya, 2020), we can conclude that non-native teachers of English can also facilitate a good ESP course.

6. Recommendations

On the basis of the results, a number of recommendations will be offered to develop a comprehensive English language learning program for dental students. Taking into account that the students perceived their skills in reading, listening, writing, and speaking to be below intermediate level, it is therefore important to start with English for general purposes that focuses on boosting learners' proficiency to an intermediate level. This can be implemented by conducting a diagnostic English test for the first-year students to determine their level of English proficiency. Students whose proficiency falls below intermediate will be mandated to take General English in their first year. In other words, the requirement to take a dentistry English course in the 2^{nd} , 3^{rd} , and 4^{th} year of study will be an intermediate level of English. The highly structured dentistry English course should promote learners' academic skills in dentistry. This involves creating courses in dentistry that foster reading and writing skills in English because those skills are highly desired by the learners. Considering that the students want to study dental material instructions that are available in English and learn dental terminology in English, then reading and writing skills can be used to foster learners' vocabulary, which is critical for learning dental terminologies. By the fifth year, learners should be guided on how to apply the language skills they have acquired over the years in their daily lives. Thus, considering the importance they place on reading and writing research publications because most of the new innovations and materials in dentistry exist in English and the students are expected to write mini-thesis in their 6th year, we would suggest the creation of an English for Academic Purpose course that focuses on how to read and write research papers. Lastly, the students believe English language learning will help them succeed in the future as a dentist and will provide more job opportunities for them as a dentist. It is then important to develop English for occupational purposes, whose goal is to focus on spoken English in the workplace. For instance, interacting and consulting with patients from English-speaking countries as well as presenting to fellow English-speaking dentists at an international seminar and conference. In conclusion, for future dentists to learn English well at school, they will need to combine English for general purposes, English for specific purposes, English for academic purposes, and English for occupational purposes.

In order to implement a successful ESP course, ESP teachers (native and non-native) require more than just being a language provider (Hutchinson & Waters, 1987). According to Mohemmed (2014), a teacher should have a relevant background in the specific subject, be confident, aware, sensitive and ready for challenge and change, meet with other ESP teachers whom he can discuss with and benefit from their experience, and continue to do research and study in ESP to be up to date with every change and develop his skills. They must also engage in constant training and development of their classroom skills in ESP teaching. The above suggestion is critical because Chilean teachers of English are only trained at primary and secondary educational levels and ESP for undergraduate students.

7. Conclusion

The main goal of the current study was to explore the need for English for Dentistry courses in the degree program of Dentistry at the Universidad Autonoma de Chile, Temuco. One of the most significant findings is the perceived importance of English for studying dentistry and for their future careers as dentists. Additionally, students expressed the inadequacy of English learning courses in their program curriculum as well as their current low level of English proficiency. Also, participants expressed the need to focus on reading, writing, and vocabulary skills for the purpose of writing and reading dentistry research papers in English. As an institution, the current findings make us understand the importance of developing a comprehensive English teaching program that encompasses English for general purposes to foster their basic English proficiency, English for academic purposes (dentistry English), which is critical to studying dentistry, and English for occupational purposes (English for dental consultation) to add value to their career as a future dentist. Concerning the contribution of this study to ESP research, this is the first study shedding light on English for dentistry purposes in a Chilean context. The findings in this report are subject to at least one limitation, which lies in the fact that this study used a self-perception survey to assess the language skill achievement of the learners. This can compromise the validity of their responses due to self-flattery (Oller & Perkins, 1978). This limitation means that our findings need to be interpreted cautiously. Overall, this means that the Universidad de Autonoma and ESP practitioners in Chile and other countries can use the results of the research to improve their dentistry programs and change how they teach English in the classroom for dentistry purposes.

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