



Exploring Perceptions of Pharmaceutical Vocational High School (VHS) Students toward the Importance of English for Their Future Career

Futia Rosida, Universitas Brawijaya , Indonesia.*

Wahyu Diny Sujannah, Universitas Brawijaya , Indonesia

Abstract

Vocational High Schools (VHS) prepare their students to be ready to work in their fields after graduation. In this globalization era, understanding English will be beneficial and a plus point for the students when looking for a job. Thus, this descriptive qualitative research aimed to explore the perceptions of pharmaceutical VHS students regarding the significance of English for their future careers. The participants, consisting of eight twelfth-grade students who had high English scores and majored in Industrial Pharmacy, were interviewed and the findings revealed that they believed that English proficiency was crucial for their future careers as it helps in accessing international job opportunities and resources, benefiting from professional development and in-house training, and overcoming language barriers in a globalized world. Thus, it is suggested that the English curriculum should be tailored to meet the specific language needs of the pharmaceutical field and future research could explore the expectations of pharmaceutical industry employers regarding the English skills of job applicants.

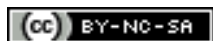
Keywords: Students' perception, Vocational High Schools (VHS); Pharmaceutical education; English proficiency; Future career

* Corresponding Author:

Futia Rosida,
English Language Education
Program Universitas Brawijaya
Jl. Veteran, Ketawanggede, Malang, East Java,
Indonesia. Email: reykalins@student.ub.ac.id

Citation: Rosida, F., & Sujannah, W. D. (2023). Exploring Perceptions of Pharmaceutical Vocational High School (VHS) Students toward the Importance of English for Their Future Career. *DIDAKTIKA: Jurnal Kependidikan*, 17(2), 19 – 27. Doi.org/10.30863/didaktika.v17i2.5508

The article is published with Open Access at: <https://jurnal.iain-bone.ac.id/index.php/didaktika/>



Published by Fakultas Tarbiyah IAIN Bone. This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

INTRODUCTION

High schools with a vocational focus are essential for many reasons. They offer real-world education that can be an excellent option for students who are mainly motivated by hands-on learning or who have a strong interest in a particular field of study. Moreover, with vocational instruction, they can also raise earning and salary potential, increase graduation rates, and reduce dropout, arrest, and incarceration rates. Those who attend vocational high schools (VHSs) can also get a head start in their field of study and be better prepared for rewarding careers. As stated by Newhouse & Suryadarma (2011), VHS graduates perform better than public school graduates in terms of income, labor market involvement, risk of unemployment, and job quality. Therefore, one of the characteristics of vocational education distinguishing it from other types of education is its orientation in preparing students to enter the workforce.

The design of VHSs is included in the Act of the Republic of Indonesia Number 20 of 2003 Chapter VI Article 15 of the National Education System in Indonesia. Vocational education is a secondary school curriculum that prepares students for a specific job. According to Apriliana & Basikin (2021), vocational education should provide students with information and skills connected to productivity, and all disciplines should be tailored to prepare them for employment. In addition, it is critical to choose the sorts of English training appropriate for vocational students while educating them for specific employment. The capacity in English skills has become crucial in today's globalized world for many vocations, including pharmacy. Shrestha et al. (2017) believe that English is widely recognized as the global language of communication, commerce, and academia. Its importance extends to various professional fields, fostering effective collaboration, expanding career opportunities, and facilitating access to international resources. Strong English language abilities will help pharmacy students communicate more effectively with coworkers, patients, and foreign organizations (Filice & Sturino, 2002). Moreover, according to Hernandez et al. (2012), effective communication skills, including language proficiency, are essential for providing quality pharmaceutical care and planning. Language competency, including proficiency in English, is considered one of the core competencies for becoming a better practicing pharmacist and delivering integrated cross-cultural care. Considering the impact of globalization and the interconnected nature of the pharmaceutical industry, it is essential to explore whether pharmaceutical VHS students recognize the importance of English for their future careers.

The importance of English proficiency is emphasized as a crucial supporting factor in achieving students' career aspirations, especially in the context of the current globalized era. English, in addition to their practical skills, is one of the supporting factors in accomplishing their career goals in the current globalized period. By defining their career aspirations, they can begin preparing and investigating the enabling variables to attain their true future profession. Furthermore, the government joined ASEAN Economic Community (AEC). With the presence of AEC, foreign workers from Southeast Asia can travel to Indonesia more easily, and Indonesian workers can travel to other neighboring countries in Southeast Asia more readily (Warsono, 2017). Because of its potential and abundant resources, Indonesia attracts many foreign workers. Therefore, it is quite challenging for Indonesian job seekers to compete with immigrants.

In fact, the implementation of English instruction in VHS in Indonesia presents a distinct and complex challenge. The curriculum specifies that the basic competencies are the

same for both Senior High School (SHS) and VHS. The Indonesian National Curriculum mandates the teaching of General English to both SHS and VHS students, covering only the fundamental skills of English. However, this standardized approach needs to adequately address the specific needs of VHS students who are being prepared for the workforce. Recent research by Natsir et al. (2022) sheds light on the English teaching practices in Indonesian VHSs, revealing a need for more emphasis on vocational specialization. It is also stated by Srinawati (2019) that the content of the textbooks requires more contextual relevance and tends to be overly generalized. For instance, at one of the private VHSs in Malang, a school specializing in Industrial Pharmacy, English instruction largely resembles that of SHSs. Consequently, the teaching only focuses on General English that primarily revolves around grammar lessons, with limited attention to contextual vocabulary and terminology related to industrial pharmacy. This disparity between the curriculum and the industry demands creates a mismatch between graduates' competencies and the skills employers seek. Therefore, VHS needs to implement ESP as it focuses on developing language skills that are directly relevant to specific fields or professions

However, several studies have investigated the correlation between English for Specific Purposes (ESP) and pharmaceutical VHSs, seeking to identify the specific language needs and requirements of pharmacy students in their academic and professional pursuits. One crucial area of interest is the role of English in facilitating effective communication with international pharmaceutical companies and professionals. Research conducted by Laili & Nashir (2023) suggests that English is essential for pharmacy students to engage in global collaborations, access up-to-date information on pharmaceutical innovations, and understand industry standards. Furthermore, pharmaceutical science is an inherently international discipline, with a vast amount of scientific literature published in English. As a result, a high level of English proficiency is crucial for students to comprehend and utilize this literature effectively. Semartini's (2022) finding reveals that pharmacy students who possess strong English skills demonstrate a higher ability to engage with complex scientific texts, enabling them to stay informed about cutting-edge developments and advancements in the field.

Nevertheless, there is limited information specifically addressing the perceptions of pharmaceutical VHS students towards English for their future career. Take for example, the study conducted by Apriliana & Basikin (2021) aiming to reveal VHS students' English perceived needs and their career aspirations. While this study did not specifically focus on the pharmaceutical VHS students, it provides some insights into the perceptions of VHS students towards English and their career aspirations. Another study was conducted by Srinawati (2019) focusing on the needs analysis of English for pharmaceutical students at a medical VHS. This study specifically targeted pharmaceutical students and aimed to investigate and analyze their needs in learning English. In addition, the other study was carried out by Eldalo et al. (2014) on Sudanese pharmaceutical students' perceptions on their education and future career aiming to determine their opinions and measure their satisfaction with education instructions. Although those studies did not specifically address the perceptions of pharmaceutical VHS students, it provides insights on that. To bridge the existing knowledge gaps from prior research, this research explored more on the pharmaceutical VHS students' perceptions of how English is crucial for their future careers.

This research focused on investigating the perceptions of pharmaceutical VHS students on the importance of English for their future careers. In fact, perception is a cognitive process

that plays a fundamental role in how humans interpret and make sense of sensory information received from the environment. Binet (1899) defines perception as the cognitive process through which people interpret and make sense of sensory information to generate an impression or knowledge of someone or something. They will use their subjective feelings, beliefs, and emotions to discover the meaning of their experiences. In addition, according to Komara (2021), the way individuals comprehend and give meaning to the language they encounter in the process of learning refers to their perception in language learning. This involves their attitudes, beliefs, and expectations concerning the language and the learning process.

METHOD

This descriptive qualitative research aiming to explore how pharmaceutical VHS students perceived English in relation to their future careers was held at one of the private VHSs in Malang in which the participants were eight students chosen from two twelfth grade classes majoring in Industrial Pharmacy who had high scores in English. In choosing the participants, the researchers also considered the information from the English VHS teachers regarding the students who were active during the class. The participation in the study was voluntary, and the participants were guaranteed confidentiality. The researchers could not insist on the participants' involvement in following ethical research protocols. They had the right to stop any time they wanted for their reasons. However, the participants were constructive and cooperative during the data collection process.

It is common in research studies to choose final-year students as the respondents because they are about to graduate and have completed most of their coursework, making them more knowledgeable about their field of study. As stated by Francken et al. (2022), senior students may have more experience in their field through internships or other practical experiences. In addition, by selecting those who had achieved high scores, it was likely that they had demonstrated a strong understanding of the English subject. This provides an opportunity to gain insights from those who have excelled academically and potentially developed a deeper understanding of the importance of English for their future career. Interviewing students with high scores can offer valuable perspectives and insights into their perceptions of the importance of English skills, their experiences with English instruction in VHSs, and their thoughts on incorporating ESP materials. These students may have a greater level of engagement and motivation in learning English, which can provide valuable insights into the factors that contribute to their success and satisfaction in language learning. This scientific approach ensures that the study collects data from students who have demonstrated a strong academic performance and can provide meaningful insights into the research questions.

The researchers utilized an interview guide that had been previously validated by an expert in English Language Teaching and ESP. It was designed to align with the research focus and aimed to explore the perceptions of pharmaceutical VHS students towards the importance of English for their future career. It consisted of several open-ended questions to encourage participants to share their unique perspectives and elaborate on their answers. Its dimensions covered VHS students' perceptions and educational experiences, providing a comprehensive framework for understanding the multifaceted role of English in their careers. During the interview, the researchers intended to create a comfortable and engaging environment,

allowing the participants to express their thoughts freely and provide rich qualitative data. The process of collecting data through the interview was conducted online using WhatsApp and Instagram in approximately 20-30 minutes per student. In addition to the interview guide as the primary instrument, the researchers also used classroom observation sheets to see how interested and involved the participants were during their English classes.

To analyze this data effectively, the researchers employed three distinct phases of thematic analysis commonly used in qualitative research. The researchers used three phases of thematic analysis in qualitative research, including data reduction, data analysis, and verification by applying Huberman & Miles (1994) theory. According to Majumdar (2019), thematic analysis provides researchers with a flexible and rigorous approach to analyzing qualitative data in various fields of study. The first phase, data reduction, involved condensing and organizing the collected data to focus on the most relevant information. This process helps to identify key segments of the interviews that are crucial for addressing the research questions. Next, in the data analysis phase, the researchers delved deeper into the condensed data to identify patterns, recurring ideas, and themes. This systematic examination allowed them to discover meaningful connections and associations within the dataset, providing valuable insights into the participants' viewpoints. The third phase involved verification to validate the emerging themes and patterns. This step ensured the rigor and accuracy of the analysis, enhancing the credibility of the findings. In the end, the data collected through the interview would provide valuable qualitative information to analyze and interpret the participants' perspectives, enabling a comprehensive understanding of the research topic.

FINDINGS AND DISCUSSION

Findings

After gathering and analyzing the data, the researchers obtained several outcomes derived from the interview conducted with pharmaceutical VHS students, focusing on their perceptions of the significance of English for their future careers. This section presents the findings extracted from the interview excerpts with them.

International Job Opportunities

Some students believe that international job opportunities are crucial for their future careers. S2 and S4 have articulated their insights, as evidenced by the following quotations.

S2: "The scope of pharmacy is huge, and we definitely don't know where we'll find work. We may continue our careers internationally and I believe that English is very helpful for future careers."

S2 expressed a positive outlook on the vast scope of opportunities within the field of pharmacy. S2's acknowledgment of the uncertain nature of the job market also reflects an awareness that the field of pharmacy may lead them to work internationally, where English proficiency can play a crucial role in shaping the future careers.

S4: "There are numerous opportunities if I become proficient in English, such as the possibility of working abroad."

S4: "I think in today's era, many companies and industries require their employees to be proficient in English, moreover in multinational companies. It is also a plus point, so now I am making an effort to apply it in my daily life."

S4 expressed the importance of English because it offers numerous opportunities especially for working abroad. Furthermore, during the interview, S4 displayed a keen awareness of the contemporary job market's language requirements. S4 believes that many companies and industries now expect their employees to be proficient in English, especially in multinational

companies. It highlights the proactive approach of students, like S4, who are making efforts to incorporate English into their daily lives to prepare for future career demands.

Access to International Resources

In addition, students' views extend to the significance of English to access international resources. S3, S7, S6, and S2 have articulated their insights, as evidenced by the following quotations.

S3: "Many pharmacy manuals, one of which is HPE (Handbook of Pharmaceutical Excipients), use English. It is also a provision for those of us who want to work in the pharmaceutical industry or continue their studies abroad"

S7: "Many terms in pharmacy that use English and there are also pharmaceutical books that use English such as HPE book, so I think to make it easier for us, we can learn English."

S3 emphasized that many essential pharmacy manuals, such as HPE, are written in English. In addition, S7 also mentioned that many terms in pharmacy and pharmaceutical books are in English. It reveals that proficiency in English is essential for accessing critical resources and information within the pharmaceutical industry.

S6: "Several articles related to pharmacy are in English, so I think that having great English skills will make it easier for us to write reports and analyze data in the field of pharmacy."

S2: "The world of pharmacy is very broad, and most pharmaceutical journals are in English. So, English skills are very necessary and also very useful for our ease as students in learning new things."

In addition, S6 and S2 informed the researchers that many resources such as journals and articles related to pharmacy are in English. By being able to comprehend English manuals and research literature, pharmacy professionals can stay up-to-date with the latest advancements in their field and ensure compliance with international pharmaceutical regulations. Both students acknowledge that a significant amount of pharmaceutical research, literature, and information is available in English. They believe that being proficient in English enhances their ability to access and utilize these valuable resources for their studies and future career.

Professional Development and In-house Training

A student highlights the crucial role of English in helping her benefit from professional development and in-house training as stated as follows.

S1: "In the past, a speaker from the industry taught us using PowerPoint as a medium. If I am not mistaken, the material was about Quality Assurance (QA) and Quality Control (QC). The content explained the sequence of work, what it entails, and how it should be done. However, the problem was that the PowerPoint slides were in English, making it difficult to understand even though the speaker explained it in Indonesian."

S1 recounts an instance where a speaker from the pharmaceutical industry conducted a training session, specifically focusing on QA and QC. However, a significant challenge arose during this training event – the PowerPoint slides used for the presentation were in English, despite the speaker explaining the content in Indonesian. It was difficult for S1 to fully grasp the technical details and information presented, even though the speaker was using their native language. The finding highlights the critical role of English skills in accessing and benefiting from such training opportunities.

Way to Overcome Language Barriers

Several students provide their insights into the importance of English in overcoming language barriers and facilitating effective communication in a professional context, as evidenced by the following quotations.

S8: "I think English is important because it is an international language, so we can communicate with other people if we work in Indonesia and we get customers who don't speak Indonesian."

S8 recognizes that English is essential because it is an international language. S8 highlights the importance of English in enabling communication with people who do not speak Indonesian, especially in a professional context. It aligns with the point about overcoming language barriers, as it underscores how English proficiency allows individuals to bridge linguistic gaps when dealing with international customers or clients. This is particularly relevant in industries like pharmaceuticals, where global communication is expected.

S3: "I think it is important in the future, because it allows me to effectively communicate with patients, colleagues, and healthcare professionals from different backgrounds."

S3 mentions the importance of English in the context of healthcare professionals. Effective communication with patients, colleagues, and healthcare professionals from diverse backgrounds is crucial in the healthcare and pharmaceutical fields. English is a common language that helps them overcome language barriers and provide quality care, making it a valuable skill in healthcare-related careers.

S5: "We may continue our careers internationally, and I believe that the ability to speak English is beneficial for future careers in any field."

S5 emphasizes the potential for international careers and the importance of English in achieving success in various fields, including pharmaceuticals. This directly relates to overcoming language barriers, as English proficiency is crucial in navigating global job markets and engaging effectively with international colleagues and partners. S8, S3, and S5 emphasize how English proficiency enables effective communication and facilitates success in industries where diverse linguistic backgrounds are encountered.

Discussion

The findings revealed that the students perceived that English is vital for their future careers from different points of view. Related to the international job opportunities, S2's and S4's perspectives, particularly in the context of the pharmaceutical industry, illustrate the vast scope of opportunities available internationally. Professionals in this field may find themselves working in various countries or collaborating with international partners. S2 believes that English proficiency facilitates effective communication and career mobility. The findings presented align with research conducted by Annisa et al. (2023), which underscores the critical nature of English proficiency as a fundamental skill sought by employers across various positions and industries. Furthermore, in the private sector, there is a strong emphasis on the importance of effective English communication, which not only enhances graduates' employability but also opens doors for career advancement opportunities. Additionally, S4's observation about the growing expectation of English proficiency in companies, especially in multinational corporations, is consistent with the finding of Mobärg (2012) research which highlights the significance of English for multinational companies since it serves as the primary language for communication in the global business arena. In addition, Ziaei et al. (2015) stated in their study that pharmacists themselves have a professional responsibility to ensure they can communicate and work effectively. International Trained Pharmacists (ITPs) should have sufficient language proficiency to communicate effectively with patients and colleagues. Proficiency in English can also foster a positive outlook on aspects like mergers and acquisitions within such organizations. As the world becomes more interconnected, language proficiency remains a key factor in securing promising career prospects across various sectors internationally as exemplified by the perspectives shared by S2 and S4.

Regarding access to international resources, S3's mention on HPE written in English highlights a practical aspect of language proficiency. Many key pharmaceutical references and manuals, often considered industry standards, are published in English. This means that professionals in the field, as well as students aspiring to work in the pharmaceutical industry or pursue further studies abroad, should be proficient in English to access these critical resources. English is an important language for accessing international handbooks, especially in academic fields where English is the primary language of communication.. This is in line with

the statement by Ansari & Rashidian (2012) that English handbooks can provide valuable information and resources for professionals in various fields, including education, healthcare, and clinical practice guideline development. In addition, S7 makes an important point about the prevalence of English in pharmaceutical terminology. S7 stated that there are many terms in pharmacy that are in English. It is in line with the statement of Al Shamsi et al. (2020) that English is widely used in pharmaceutical terminology although it is not the only language used.

In the context of accessing international sources, S6 and S2 informed the researchers that many resources such as journals and articles related to pharmacy are written in English. They acknowledge that a significant amount of pharmaceutical research, literature, and information is available in English. They believe that being proficient in English enhances their ability to access and utilize these valuable resources for their studies and future career. As stated by Andayani (2022), English is the most widely used language for scientific communication, and it is essential for accessing English journals and articles. The majority of scientific research is published in English, and many of the most prestigious scientific journals are published in English as well. By being able to comprehend English manuals and research literature, pharmacy professionals can stay up-to-date with the latest advancements in their field and ensure compliance with international pharmaceutical regulations.

Furthermore, in S1's experience, there was an occasion when a pharmaceutical industry representative conducted a training session that specifically emphasized QA and QC. This training session serves as a notable example of opportunities for professional development and training within the pharmaceutical sector. The speaker's objective was to educate the students on the workflow, the involved tasks, and how they should be executed within the realm of QA and QC. However, a notable challenge emerged during this training event - the speaker utilized PowerPoint slides in English, even though the content was explained in Indonesian. This language barrier made it challenging to fully comprehend the technical details and information presented despite the fact that the speaker used their native language and the training materials, guidelines, and best practices are often available in English. It is supported by Bahlol & Lagutkina (2016) statement that English is the most widely used language for scientific communication, and many pharmaceutical companies operate their business in multinational and international forms in different countries. Therefore, students aspiring to excel in their careers and take advantage of professional development opportunities need to have strong English skills. This finding underscores the importance of English proficiency for students seeking to participate effectively in training sessions, enhance their knowledge, and contribute to their professional growth.

In the context of overcoming language barriers, S8 emphasizes the importance of English, especially in a globalized world where professionals frequently interact with individuals who may not speak the local language. This is particularly relevant in industries such as pharmaceuticals, which operate on a global scale. As stated by Sampaio et al. (2021) that proficiency in English enables professionals to effectively communicate with international customers or clients, thereby building trust and enhancing business relationships. Furthermore, S3's viewpoint focuses on the healthcare sector, where effective communication is essential for patient safety and the delivery of quality care. This aligns with the research of Mariana & Purwana (2022) which highlights the significance of English proficiency for pharmacists as they interact with patients, colleagues, and other healthcare professionals. Additionally, healthcare professionals, including pharmacists, frequently engage with individuals from diverse linguistic backgrounds, and English serves as a common language that bridges these gaps, ensuring clear and precise communication in critical healthcare scenarios.

S5's emphasis on the potential for international careers and the broader relevance of English proficiency indeed aligns seamlessly with the concept of overcoming language barriers. In today's job market, where international mobility is becoming increasingly common, English proficiency serves as a vital tool for navigating the global job landscape successfully. One of the most significant challenges when pursuing international careers or engaging with colleagues,

clients, or patients from diverse linguistic backgrounds is the presence of language barriers (Pandey et al., 2021). These barriers can impede effective communication, hinder collaboration, and limit one's professional opportunities. English proficiency acts as a bridge that transcends these barriers, facilitating clear and meaningful interactions across industries and sectors.

The students' perceptions collectively emphasize that English is a valuable tool that can open doors to international job opportunities, access to critical resources, professional development, and effective communication in a globalized world. As the pharmaceutical industry continues to expand internationally and the need for clear and precise communication grows, being proficient in English remains a key asset for students pursuing careers in the pharmaceutical field.

CONCLUSION

In conclusion, this study was conducted to discover the perceptions of pharmaceutical VHS students regarding the significance of English for their future careers. The findings highlight several key points, including the importance of English proficiency in helping the students access international job opportunities, access international resources, benefit from professional development and training, and overcome language barriers in a globalized world. These insights emphasize the essential role that English plays in shaping the careers of pharmaceutical VHS students, allowing them to navigate the global job market, access valuable industry-specific resources, and communicate effectively with colleagues, clients, and patients from diverse linguistic backgrounds.

In addition, there are several recommendations that can benefit both teachers and future research. To begin with, teachers should consider tailoring the English curriculum for pharmaceutical VHS students to align more closely with their specific language needs. This customization could include introducing vocabulary, terminology, and communication skills directly relevant to the pharmaceutical field. Besides, it is crucial to incorporate authentic industry resources, like pharmaceutical manuals and research papers in English, to help students not only improve their language skills but also enhance their understanding of the pharmaceutical sector. Moreover, organizing professional development workshops or inviting industry professionals to provide training sessions in English could greatly benefit students by exposing them to industry-specific content and real-world language use. For future research, there are several avenues to explore. Comparative studies could delve into the variations in English needs and perceptions among students in different vocational fields. They can explore whether the language requirements are significantly different for pharmaceutical students compared to those in other vocational areas. Additionally, conducting surveys or interviews with pharmaceutical industry employers to understand their expectations regarding the English skills of job applicants can also provide valuable insights into the skills needed in the job market.

REFERENCES

- Shamsi, H., Almutairi, A. G., Al Mashrafi, S., & Al Kalbani, T. (2020). Implications of language barriers for healthcare: A systematic review. *Oman Medical Journal*, 35(2), 1–7.
- Andayani, E. S. (2022). The importance of learning and knowing English in higher education in Indonesia. *Research and Development Journal of Education*, 8(1), 372–379.
- Annisa, K., Luhriyani, S., & Samtidar, A. (2023). The influence of employees' English skills to their work performance (A study case at regional office for cultural properties preservation in South Sulawesi). *International Journal of Business, English, and Communication (IJoBEC)*, 1(2), 45–52.

- Ansari, S., & Rashidian, A. (2012). Guidelines for guidelines: Are they up to the task? A comparative assessment of clinical practice guideline development handbooks. *PLoS ONE*, 7(11), 1-9.
- Apriliana, N., & Basikin, B. (2021). Vocational high school students' perception in learning English and its relation to their career aspiration in Yogyakarta. *Eralingua: Jurnal Pendidikan Bahasa Asing Dan Sastra*, 5(1), 189-207.
- Bahlol, M. M. H. A., & Lagutkina, T. P. (2016). Analysis of medical representatives' activities directed to physicians in Egypt. *The Bulletin of Contemporary Clinical Medicine*, 9(1), 17-23.
- Eldalo, A., Albarraq, A., Sirag, N., Ibrahim, M., & Yousif, M. (2014). Pharmacy students' perception about education and future career. *Archives of Pharmacy Practice*, 5(2), 72-77.
- Filice, S. L., & Sturino, D. (2002). Integrating authentic materials and language skills in English for pharmacy instruction. *Pharmacy Education*, 2(2), 59-62.
- Hernandez, L., Gonzalez, E., Gomez, K., & Palacios, S. (2012). *The importance of English for the engineering and medicine schools' faculty' at the university of El Salvador*. [Bachelor Thesis, University of El Salvador]. Repositorio Institucional de la Universidad de El Salvador.
- Laili, R. N., & Nashir, M. (2023). An analysis of pharmacy students' English language needs. *Eduvelop: Journal of English Education and Development*, 6(2), 114-124.
- Majumdar, A. (2022). Thematic analysis in qualitative research. In *Research Anthology on Innovative Research Methodologies and Utilization Across Multiple Disciplines* (pp. 604-622). Tomorrow's Research Today.
- Mariana, M., & Purwana, R. (2022). The effect of English and pharmaceutical integrated learning application on students' ability in translating pharmaceutical texts. *International Journal of Cultural and Social Science*, 3(1), 161-166.
- Mobärg, M. (2012). English proficiency and attitude formation in a merged corporation with a Swedish-English profile. *Journal of Multilingual and Multicultural Development*, 33(2), 149-165.
- Natsir, M., Purba, A. S., Ellyana, E., Saragih, A. T., & Amal, B. K. (2022). English teaching in an Indonesian vocational high school majoring industrial machinery engineering. *AL-ISHLAH: Jurnal Pendidikan*, 14(2), 1743-1754.
- Newhouse, D., & Suryadarma, D. (2011). The value of vocational education: High school type and labor market outcomes in Indonesia. *World Bank Economic Review*, 25(2), 296-322.
- Pandey, M., Maina, R. G., Amoyaw, J., Li, Y., Kamrul, R., Michaels, C. R., & Maroof, R. (2021). Impacts of English language proficiency on healthcare access, use, and outcomes among immigrants: a qualitative study. *BMC Health Services Research*, 21(1), 1-13.
- Sampaio, C., Régio, M., & Morgado, M. (2021). Implementing integrated content and language in higher education in accounting classes: Implication for international business teaching. *Journal of Teaching in International Business*, 32(3-4), 236-261.
- Schwandt, T. A. (1996). Qualitative data analysis: An expanded sourcebook. In *Evaluation and Program Planning* (Vol. 19, Issue 1). Thousand Oaks, California : Sage Publications.
- Semartini, A. (2022). Needs analysis on English language learning among pharmacy diploma students. *Academic Journal Perspective : Education, Language, and Literature*, 10(1), 39-48.
- Shrestha, A., Bhattarai, D., Thapa, B., Basel, P., & Wagle, R. R. (2017). Health care workers' knowledge, attitudes and practices on tuberculosis infection control, Nepal. *BMC Infectious Diseases*, 17(1), 1-7.
- Srinawati, W. (2019). Need analysis of English for pharmacy students at medical vocational high school of Prof. Dr. Moestopo. *International Conference on Environmental Awareness for Sustainable Development in Conjunction with International Conference on Challenge and Opportunities Sustainable Environmental Development*, 1-8.
- Warsono. (2017). Majalah manajemen & bisnis: Indonesia dalam menghadapi masyarakat ekonomi ASEAN (MEA). *Stie Gabesha Press*, 1(2), 88-100.
- Ziaei, Z., Hassell, K., & Schafheutle, E. I. (2015). Internationally trained pharmacists' perception of their communication proficiency and their views on the impact on patient safety. *Research in Social and Administrative Pharmacy*, 11(3), 428-441.