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Introverted Students' Perceptions of the Yoodli AI in Public Speaking Course

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ABSTRACT

This research evaluates the impact of the developed artificial intelligence tool- Yoodli on public speaking skills as well as the confidence of introverted students. AI technology has grown rapidly in education, but little research focuses on its impact on introverted users. Qualitative methods are used, with data collection through observation and in-depth interviews. The results of the study showed that the majority of participants experienced significant improvements in public speaking skills and confidence after using Yoodli. These results show that Yoodli can be a useful solution for resolving introverts' difficulties when giving public speeches. Moreover, Yoodli may be customized to satisfy various individual demands and offer objective, consistent feedback. The research enriched the literature on learning public speaking skills by adding new perspectives on the use of AI.

Keywords: *introverted, public speaking, ai, noodle*

1. Introduction

English literature students are compulsory to take the course in public speaking. Public speaking skills must be possessed by students in the current digital era. Lucas explains that public speaking can change or produce something different in the world in a simple way, just by speaking. Apart from that, by mastering this skill a person can also rule the world because one of the characteristics of public speaking is persuasiveness; someone who has good public speaking ability can inspire and influence others to achieve common goals. As stated by Amelia, Dina (2022), public speaking plays an important role in various aspects of life. Now, this era is the Industrial Revolution, and public speaking skills are relevant to conveying and explaining knowledge effectively.

Unlike extroverts, the course is an immense challenge to introvert students. The characteristics of an introvert are always more nervous, fearful, and anxious while speaking in public. According to (Rahman, 2022), the average anxiety level of introverted students in public speaking is around 54, while for extroverted is around 48.9. Besides, according to Laney (2002), introvert prefers to avoid crowds, hesitate to talk, keep quiet when others are doing something, lose eyesight when meeting new people, move cautiously, and perform only in the activity they have chosen, not sharing their opinions freely. They are discomfort when do not have enough time alone, are overwhelmed, move, and respond cautiously to anything, any situation remains relatively unemotional and masks most feelings. This is because people with introverts have extra dopamine hormones. As stated by Laney (2002), introverted people have a lot of dopamine in their bodies, so when they are required to speak in front of a community, their anxiety and tension levels will increase. Dopamine is a hormone that organizes movement and the capability to move, including learning, working memory, cognition, emotions, and social interaction (Lieberman, 2000 in Rahman, 2022).

Hence, AI (Artificial Intelligence) can be described as a branch of Computer Science that aims

at building intelligent systems that are capable of solving problems that would otherwise be regarded as difficult for any human being to solve. AI systems are capable of perceiving their environment, being able to understand the collected data, and having the ability to learn and make decisions that are based on the data acquired (Saleh, 2019). In the context of education, AI can be used to increase the efficiency of public speaking training through the effective use of training methodologies for the course. The advantages of using AI in speaking are it can give individual advice, immediate response, and exemplify practice cases which can benefit learners for speaking enhancement. Public speaking also benefits introverted students as they get nervous or fear of speaking in public than extroverted students. In this case, using AI, one can ensure that introverted people become more confident in their Public Speaking, allowing the Performing Feedback to be given at their own pace with the soft help of AI, thus creating a protective atmosphere for Introverted people to learn. One example of AI in this context is Yoodli, an AI platform designed to help people improve their public speaking skills. Yoodli is an application that gives real-time comments, detailed coaching on the content, and Delivery of the speech by a user. This platform assesses other factors like the kind of words that are used, the rate at which one speaks, pitch, and even physical gestures. This platform is intended for practicing public speaking skills and completing special exercises and simulations with the help of AI; it indicates the presence of feedback and assessment of fragments in terms of the use of certain words, speaking rate, and intonation. Moreover, it is a platform with exercises that simulate public speaking that uses artificial intelligence to make real-time assessments of the user or to assess certain aspects of the user's speech such as the choice of words, rate of speech, and the use of tones among others. Some of Yoodli's main features include: Among the four, speech analysis has the following characteristics; 1) it provides general feedback on the manner, rhythm, pauses, and stutters during the speech, 2) it provides instantaneous feedback to the user when practicing speaking, 3) It gives specific suggestions where to focus while conversing, 4) It consists of sequences of structured practice and simulated situations for speaking in public. As stated above introverts feel uncomfortable when speaking in public, Yoodli assesses this problem, based on the rate of speaking, whether there are many 'um,' 'uh,' 'so' and 'well.', and where it is appropriate to speak at a slower pace, and pay more careful attention to what is said and how it is said.

The objective of this research is: to describe the introverts' perception of specific AI (Yoodli) that helps them to build self-confidence in public speaking; identify what aspects of the AI training are most helpful in the process of improving their self-confidence in performance; how AI training helps the introverts to regulate their performance that is being delivered during public speaking; to reveal the nature of changes in perceived self-confidence, and motivation to perform in public.

Thereby, this research has substantial implications to extend the knowledge regarding its findings in introverts' perspectives of AI-based public speaking learning. The identified insights can help educators and educational technology design and broaden the training of a much more effective public speaking experience for introverted learners, theories, and models.

Besides, according to Syam (2021) in (Mohammad et al., 2023), perception is the process by which individuals interpret information acquired through all five of their senses. Jafar (2019), defines perception as an ordered interpretation of stimuli that shape attitudes and actions. Therefore, perception refers to students' ideas, opinions, and thoughts regarding anything that affects how someone acts. According to Liem, et.al (2008), perception is divided into two categories: positive and negative perceptions. Positive perceptions, such as self-efficacy beliefs, which are positive perceptions about one's learning abilities, are related to the use of proper learning strategies and enhanced performance. Self-efficacy is defined as the extent of control over learning that students have; it implies that students with high self-efficacy are likely to be motivated and hence more involved in the learning process. Mastery motivational goals, which are concerned with gaining knowledge, lead the students to commit

themselves to mastering and using superior techniques to acquire knowledge. On the other hand, negative perceptions would result in poor work attitudes and pull back and consequently lead to low academic achievement levels. Students with low self-efficacy are less motivated and are likely to quit as soon as they find it difficult to solve a problem. Another type of achievement goal is performance avoidance, which day-to-day refers to avoiding failure, contributes to students' disengagement, as well as poor peer relationships. On the other hand, Sutikno (2005), defined learning effectiveness as the ability to enact planned learning to accommodate students' learning and to allow them to complete intended goals and objectives. In accordance with, Mayer (2008), effective learning is "the acquisition of knowledge, skills, and attitudes in a way that allows learners to apply what they have learned to new situations." Similarly, Sinambela (2006), lists several measures of how effective learning is: mastery learning, the efficacy of student activities, and the efficiency with which the instructor oversees instruction and how students react to constructive instruction. Hattie (2009), found other related influences on learning including feedback, teacher-student interactions, and students' self-regulation strategies. In addition, Ambrose (2010), describes seven principles of working knowledge including activation of prior knowledge, organization of knowledge, goal, repetition and feedback, development of students, and learning environment.

Therefore, the study also addressed an existing gap in the current knowledge and research regarding AI platform efficacy for public speaking especially applied to introverted students. The gaps that have been identified are 1) The limitation of research in the effectiveness of AI to enhance public speaking; the researchers overlooked the specific needs and limitations of introverted individuals regarding their overall performance via AI technologies. 2) The limitation of research addresses the opinions and experiences of introverted students learning with AI-based tools in the context of the performance of public speaking; many research addresses implementing AI for learning speaking generally or only for global measures, and little is addresses users' characteristics such as introvert. This limitation of research became a barrier to explaining how platform AI and other smart systems are designed and developed for introverts, in speech public speaking, 3) there is a need for qualitative research about the experiences of introverted students using Yoodli AI; based on the phenomenology approach to qualitative research, one gain a better understanding of how such students and, in particular, themselves perceive and use the Yoodli platform. Besides, quantitative research offers quantitative data on the efficacies of AI platforms but does not describe how these platforms assist academic introverted students enhance self-confidence in public speaking.

This research differs from previous studies by introducing new aspects, including the limited exploration of AI's impact on introverted users, particularly students, in assessing their impressions of AI platforms for public speaking. Moreover, the previous literature did not incorporate introverted users into their studies. This research offers insights to the developers of AI platforms and educational implementers on how to pay attention to the introverted learner, and finally, the use of a phenomenological qualitative research approach in the study is comparatively rare in the scholarship of employing AI in speaking teaching. Research often focuses on quantitative analysis; experimental studies, such as Junaidi's, "Artificial Intelligence in EFL Context: Rising Students' Speaking Performance with Lyra Virtual Assistance", employ quantitative method to analyze the effectiveness of the artificial intelligence (AI) application Lyra Virtual Assistant (LVA) in enhancing students ' speaking skills in English as a Foreign Language (EFL) classes. The results showed that LVA is an effective AI app for EFL students to improve their speaking skills. Therefore, the research from Hidayatullah (2024), "The Impact of Talkpal.AI on English Speaking Proficiency: An Academic Inquiry", employs a quantitative method to know how Talkpal. AI helps in improving overall fluency and the degree of impact in English-speaking lessons. The findings revealed that Talkpal is uniquely positioned in the market as a software whose benefits are most felt by patients with certain health conditions. AI

positively impacts.

Besides, the findings of this research are expected to contribute to enhancing the effectiveness of the Yoodli AI platform in assisting introverted students in boosting their public speaking self-confidence and achieving their full potential.

2. Methodology

This research uses a qualitative approach with a phenomenological design. According to Badil (2023), "phenomenology is the qualitative research inquiry that explores the lived experiences of the individual". Furthermore, Alhazmi (2022)defined that qualitative phenomenology is one of the research paradigms geared towards obtaining and discussing the students' beliefs and attitudes concerning their experience of transition. Therefore, this study is done to capture the nature of participants' interactions in the given situation and thus aims at describing the kind of experiences students meet in this new social educational context. Semi-structured interviews and focus groups occur to investigate the phenomenon with the heaviness of understanding the meaning of the experiences concerning particular situations.

Thus, phenomenology was chosen because it allows researchers to understand in depth the experiences and perceptions of introverted students when using the Yoodli AI platform to practice public speaking skills. In this approach, it is the student's understanding of the meaning of the experiences that are of fundamental importance in the context of AI technology usage.

The research sample consisted of 20 introverted students who took public speaking classes at Pamulang University. The 20 students were chosen as the research sample based on purposive sampling, which selects individuals specifically relevant to the study. This number was considered enough to provide clear insights into how introverted students perceive the use of AI in public speaking classes. It also aligns with qualitative research methods, which often use smaller, focused samples to explore topics in depth. Based on Sugiyono (2012), purposive sampling is defined as a method of selecting a sample with particular regard to the study. To get the sample this research used the personality test MBTI (Myers-Briggs Type Indicator), one of the instruments that is often used to determine people's personality characteristics (Setiawati, 2015).

This research was completed in two months from the inception of the study to the preparation of this report. From April 1, 2024, to May 30, 2024.. This duration was chosen to ensure the students get adequate time to engage with the Yoodli AI option as well as the exact amount of time they need to practice public speaking on their own. Apart from that, it is also to have a better perspective on the changes in their perceptions and skill acquisition.

This data collection involved the use of observation and semi-structured interviews to capture all the students' experiences. Observation was used to monitor whether the students were consistently using Yoodli at home on a regular schedule. The semi-structured interviews helped to identify the students' perceptions, current experiences, and attitudes toward the Yoodli AI platform after using it.

It's important to note that this study was conducted without any direct interference from the researcher. Every student completed the task independently at home because the medium used was online. Real-life situations were simulated in Yoodli when students practiced public speaking without supervision. Observation was conducted indirectly through journals maintained by the students. Every student was asked to keep a daily journal that recorded the time, frequency, and duration of their use of Yoodli,

Besides, The study was conducted independently at the students' homes for several reasons: First, AI tools allow students to train individually at home and at their own pace, which helps reduce the anxiety that often arises in classes with large audiences. This approach is especially helpful for introverted participants, who tend to feel more anxious in crowded social settings. Second, while students are expected to deliver presentations on their own, they often need to practice individually

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before appearing in front of an actual audience. This approach helps to understand how students use Yoodli AI in scenarios that are closer to real-life situations, where constant supervision is not available. While appreciating this innovation, it's important to consider how well this technology can be integrated into students' study practices. Self-directed practice at home provides a better understanding of how AI tools can enhance public speaking skills in introverted learners.

In addition to observation through journals, semi-structured interviews were conducted to gain deeper insights into the students' experiences with Yoodli. These interviews allowed for open-ended discussions, enabling students to share their personal views and detailed feedback about their interactions with the AI platform. The semi-structured format provided flexibility, allowing the interviewer to explore specific topics in more depth based on students' responses. This method helped to uncover nuanced perceptions, such as how students felt about the platform's usability, the challenges they faced, and how Yoodli impacted their public speaking practice. By combining insights from both the journals and interviews, the study was able to comprehensively understand the effectiveness of Yoodli in supporting introverted students in their public speaking development. This approach ensured that the research captured a well-rounded view of the student's experiences and attitudes towards the AI tool, enhancing the overall understanding of its role in their study practices.

Then, the analysis of data using Miles and Huberman's theory (1984) in Sugiyono (2017), is conducted as follows:

1) Data Reduction.
   Data reduction is accomplished by compiling the gathered information. The primary concerns are chosen from the phenomena that have been noticed about the research topic. To examine the results in accordance with the needs of the research, all pertinent data are added as needed, concentrating on the crucial areas. The idea of Miles and Huberman state that less information is deemed unneeded based on observation, interview, and document review results. From the observation data, specific information was gathered including the ways the participants used the Yoodli AI platform, the actual and/or perceived feedback received, the features used by the participants, and the overall practice of public speaking at home. Note these were the field notes a person takes or notes that were not well arranged but once grouped they are put in order. The perceptions obtained from the interviews included impressions about the Yoodli AI platform, personal experience with the tool, the challenges faced, and the solutions offered. From the participants' reflective field journals, narrative data of their daily experiences and progress with the usage of the Yoodli AI platform were collected. These writings allowed them to read their private speeches, speeches that had been practiced, and their development in this area of public speaking.
2) Data Display.
   To find patterns and themes, the qualitative data from the data reduction step is presented using a data display. This step facilitates others' comprehension of the primary findings. To establish the respondents' experience using the Yoodli AI platform, the problems they encountered during its use, and their opinions on the efficiency of the platform in their public speaking skills improvement, the data collected is classified and analyzed.
3) Conclusion or Drawing/Verification.
   Conclusions are drawn and verified in the last phase. The entire qualitative data obtained from semi-structured interviews and reflective diaries is the basis for the results drawn from this Yoodli AI platform research.

Furthermore, to ensure the validity of the data, this research employed data triangulation as described by Sugiyono (2017). Data triangulation involves using many data sources, such as people, place, and time

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(Hales David 2010 in Rosyidah 2024). In this study, data triangulation was applied by incorporating various data sources, including observation and interviews to collect information for the effectiveness of AI Yoodli for introverted students and understanding their perception.

3. Result and Discussion

3.1. Rresult

The results of this research are organized based on the key findings that emerged from the analysis of observation and interview data. These findings reflect introverted students' perceptions of using the Yoodli AI platform to improve their public speaking skills. The main findings identified are:

1. General Perception of Yoodli AI

Data shows that most introverted students have a positive view of Yoodli AI. They feel that the platform provides useful and detailed feedback on their speaking skills. Many students find features like live feedback and speech rate analysis helpful in identifying areas for improvement.

Observation: During the use of Yoodli, students appeared more confident and active in utilizing the various features provided, such as word usage and intonation analysis.

Interview: Students reported feeling more prepared and confident after practicing with Yoodli, as the feedback helped them address their concerns and anxieties about speaking in public.

2. The Effect of Yoodli on Anxiety and Self-Confidence

Yoodli's impact on students' anxiety and self-confidence is significant. Consistent use of Yoodli seems to reduce public speaking anxiety and increase self-confidence.

Observation: Students who previously exhibited high anxiety before presentations reported reduced anxiety after regularly using Yoodli.

Interview: Students felt that independent practice with Yoodli provided them the opportunity to practice in a more comfortable environment, which directly contributed to an increase in their self-confidence.

3. Difficulties Encountered in Using Yoodl

Students faced several challenges when using Yoodli, including difficulties with certain features and the need for clearer guidance.

Observation: Some students appeared confused with complex analysis features, such as intonation analysis and speech tempo.

Interview: Students expressed a need for additional guidance or more detailed tutorials to maximize the use of Yoodli’s features.

4. Impacts of Yoodli on the Development of Speaking Skills

Yoodli has a positive impact on the development of students' speaking skills. The platform is effective in helping them practice and improve their speaking abilities.

Observation: Students showed improvement in their speaking skills from session to session, with

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measurable enhancements in speech structure and delivery.

Interview: Students felt that Yoodli's structured exercises and specific feedback helped them improve their speaking skills and effectively convey their messages.

5. User Experience with Yoodli's Interface

User experience with Yoodli's interface affects students' overall experience positively or negatively.

Observation: Students generally found the interface easy to use, though some experienced initial confusion navigating certain features.

Interview: Feedback from students indicated that a more intuitive interface design or additional support in navigating features could enhance their overall experience.

6. Perceived Accuracy of Feedback Provided by Yoodli

Students' perceptions of the accuracy and usefulness of the feedback provided by Yoodli are crucial for understanding its effectiveness.

Observation: Students valued the accuracy of the feedback, especially regarding aspects like pronunciation and clarity, which they found consistent with their self-assessment.

Interview: Students expressed satisfaction with the relevance and precision of the feedback, stating that it helped them address specific aspects of their speaking performance.

7. Motivation and Engagement with Yoodli

How Yoodli affects students' motivation and engagement in practicing their speaking skills is an important factor.

Observation: Students who engaged more frequently with Yoodli's interactive features reported higher motivation to continue practicing.

Interview: Students mentioned that the platform's interactive nature and feedback mechanisms significantly contributed to their motivation for regular practice.

8. Comparison of Yoodli with Other Public Speaking Tool

Comparing Yoodli with other public speaking tools provides insights into its relative effectiveness.

Observation: Some students compared Yoodli with other tools and highlighted its detailed feedback and personalized approach as standout features.

Interview Students noted that Yoodli offered advantages over other tools in terms of detailed analysis and customized feedback, which they found more beneficial.

9. 9. Challenges in Integrating Yoodli into Regular Practice

Understanding the challenges students face in integrating Yoodli into their regular practice routines helps assess its practical application.

Observation: Students faced difficulties integrating Yoodli into their routines due to time constraints and varying comfort levels with technology.

Interview: Students suggested that integrating Yoodli into their regular practice would be easier with additional support or adjustments to their practice schedules.

10. 10. Future Recommendations for Yoodli Based on Student Feedback

Insights into what students believe could be improved or added to Yoodli guide future development.

Observation: Students recommended enhancements such as more personalized feedback options and clearer instructions for using advanced features.

Interview: Students suggested that incorporating features based on their feedback could make Yoodli a more valuable tool for improving public speaking skills.

3.2. Discussion

This study explores the experiences of introverted students who used Yoodli, an AI-powered tool, to improve their public speaking skills. Over the two months, participants shared their perceptions of how Yoodli influenced their confidence and abilities. The findings suggest that Yoodli played a significant role in reducing public speaking anxiety and fostering self-confidence among these students.

This study is different from previous research. First, this research introduces a new aspect that has previously received little attention, namely the impact of using AI on introverts. Most previous research, including Junaidi (2020) and Hidayatullah (2024), pays more attention to the quantitative approach to assess the impact of AI utilized to enhance speaking skills in the EFL setting. For example, Junaidi (2020) employed the quantitative approach to establish that the LVA positively impacts the speaking performance of EFL learners. Likewise, after researching Talkpal, Hidayatullah (2024) also found that the program AI facilitates the user to enhance their fluency in English.

This research provides new insight into the use of AI as a pedagogy, enriching ideas regarding the development of public speaking skills. These facts establish that AI does not only provide immediate and impartial feedback but also might be tailored to fit the requirements of distinct users, including introverts.

Based on the findings of this study, it can be suggested that Yoodli can indeed be a very valuable application to help students improve their speaking skills and it can be very beneficial to introverted students. It can be hired by any training institution or any educational program to make the available training programs even more enhanced in presenting workouts. It allows the student to work independently and be given precise feedback and timely responses, hence its effectiveness in helping to advance the learning process. Moreover, it can be useful for introverts who struggle with stress related to speaking in public further, because it allows practicing without excessive pressure. By incorporating this technology into the curriculum, it can produce better teaching programs and presumably better and more confident public speaking performers.

However, it is worth to note the following limitations of this study. First, while the sample involved 20 students who could be regarded as introverts, this sample appears slightly insufficient to be generalized to the entire population. The second limitation concerns the nature of data collection since the study employed qualitative research, and despite the advantages of this approach of yielding detailed

information, it could be less reliable since participants' experiences and perceptions may affect the findings of this study. Thirdly, the period of the study was two months, and thus the effectiveness of this tool could not be fully assessed in the given period. Furthermore, since the data were obtained based on participants' own experiences, social bias was a possibility where the participants provided higher scores as compared to the actual outcome of the treatment. Thus, one could suggest that future studies should involve samples with more participants and with participants' characteristics more diverse in terms of demographical features, as it could also increase the external validity of the study results. Furthermore, it is important to conduct a study that will adopt a longitudinal research design to determine the impact of using Yoodli in the long term. Future research could also nominate, which of the identified elements of Yoodli are efficient in the development of effective public speaking skills of introverted individuals as well as discover, whether similar tools can be applied in other cultures.

Therefore, for future research, it is suggested that to use the findings of the study in a more generalized way, a generalized research study should be designed with a large population sample and gender diversity. Overall, this research shows that Yoodli has great potential as an effective tool for practicing public speaking skills for introverted students. These findings highlight the importance of AI technology in providing personalized learning approaches and supporting the development of critical skills in today's digital era.

4. Conclusion

This study shows that Yoodli, an AI-powered tool, significantly increases introverted students' public speaking abilities and confidence. Once they used Yoodli for two months, the subjects saw notable gains in both categories. According to these results, introverted people's difficulties in public speaking situations can be successfully addressed by AI technology.

Unlike previous research, this study highlights the specific benefits of AI for introverted users, adding a new dimension to the existing body of knowledge. While earlier studies, such as those by Junaidi, (2020) and Hidayatullah (2024), focused on quantitative evaluations of AI tools in EFL contexts, this study emphasizes qualitative insights into the experiences of introverted users. Yoodli's ability to provide objective, consistent feedback and its adaptability to individual needs makes it a valuable tool for educational institutions and training programs.

The study has certain limitations, such as a limited sample size and a brief period of Yoodli use, but the findings are encouraging. Larger and more varied sample sizes, the use of longitudinal designs to evaluate long-term effects, and an examination of the precise Yoodli elements that most significantly enhance its efficacy should all be part of future research. Yoodli's potential will also be further validated by looking at how applicable it is in various cultural contexts.

Overall, Yoodli is an exciting way for introverted students to practice public speaking, and it emphasizes the importance of artificial intelligence (AI) in individualized learning and skill development in the digital age.

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