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Optimizing ESL Learners' Speech Act Performance: The Role of AI-Powered Chatbots in Pragmatic Competence Development

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Abstract—**This mixed-methods study investigates the effectiveness of AI-powered chatbots in enhancing the pragmatic competence of Pakistani undergraduate ESL learners, focusing specifically on the production of contextually appropriate speech acts-requests, apologies, and refusals. A total of 50 students, ranging from A2 to B2 proficiency levels (CEFR), participated in a four-week intervention involving scripted and open-ended interactions with a Google Dialog flow chatbot designed to simulate real-life conversational scenarios. Quantitative results from pre- and post-intervention assessments, based on validated pragmatic tasks, revealed significant improvement in speech act appropriateness ($p< 0.001$), with mean scores increasing from 58.4 to 76.2. Requests showed the highest performance gain (33.7%), followed by apologies (29.5%) and refusals (24.6%). Qualitative data from post-intervention questionnaires and interviews with selected participants uncovered three key themes: increased engagement and motivation, improved speaking confidence, and heightened awareness of polite and context-sensitive language use. Students highlighted the chatbot's non-judgmental, adaptive nature as instrumental in reducing language anxiety and promoting risk-taking in communication. While some limitations were noted, particularly regarding the chatbot's ability to handle Context-dependent cultural variations, the findings support the integration of AI chatbots into blended ESL instruction. This study contributes to the growing body of research advocating the use of intelligent conversational agents to foster socio-pragmatic competence, especially in underrepresented educational contexts.**

Index Terms—**AI Chatbots, ESL learners, pragmatic competence, speech acts, technology-enhanced learning**

I. Introduction

Successful second language acquisition requires not only grammatical accuracy but also pragmatic competence, which is essential for building effective social relationships (Kasper & Rose, 2002). Pragmatic competence involves the appropriate use of speech acts such as apologies, request, and refusals, all of which require an understanding of sociocultural norms (Taguchi, 2019). Traditional ESL teaching methods often emphasize grammar and vocabulary, overlooking the development of these pragmatic skills. As a result, many ESL learners produce syntactically correct sentences but fail to convey appropriate meaning in social contexts, leading to misunderstandings (Cohen, 2018; Bardovi-Harlig, 2015).

Pragmatics explores how language operates across diverse social and cultural contexts. It emphasizes the importance of social relationships, conversational norms, and cultural expectations (González-Lloret, 2019). According to Searle (1969), speech acts form the foundation of everyday communication. Making a polite and effective request in English, for example, involves both appropriate word choice and awareness of relational dynamics (Kuhn et al., 1991). Yet, many ESL learners struggle with these elements due to limited exposure to authentic interactions (Taguchi, 2012). Research shows that combining explicit instruction with practical communicative experiences fosters stronger pragmatic skills (Ishihara & Cohen, 2010).

With rapid advancements in artificial intelligence, AI-powered chatbots are reshaping language education by offering interactive and contextually rich language practice (Mohammed et al., 2025; Mudhsh et al., 2025; Rapp et al., 2021).

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These chatbots use natural language processing (NLP) and machine learning to simulate authentic conversations, respond to learners' input, and adapt to individual proficiency levels (Zawacki-Richter et al., 2019). Learners receive real-time feedback and practice using speech acts in meaningful contexts (Belda-Medina & Calvo-Ferrer, 2022).

AI tools also offer personalized learning, adjusting responses based on each student's input, unlike traditional, one-size-fits-all methods (Labadze et al., 2023; Al-Raimi et al., 2024). Moreover, the non-judgmental nature of chatbot interactions encourages learners to experiment with language forms without fear of criticism (Dewaele & MacIntyre, 2014), enhancing both confidence and communicative competence.

While chatbots show promising potential in language education, challenges remain in their integration, particularly in handling complex pragmatic elements like politeness, indirect speech, and cultural context (Zaghlool & Khasawneh, 2023; Halevy et al., 2009). Although they are improving in detecting grammatical accuracy, chatbots still struggle with appropriate language use in varied social situations (Taguchi, 2015). Numerous studies suggested that AI chatbots should supplement, not replace, direct instruction in pragmatics and real human interaction to be truly effective (Rusmiyanto et al., 2023).

This study investigates whether chatbots can support university students in using English more appropriately across social contexts. It explores how learners use chatbots to practice essential speech acts like requests, apologies, and refusals. Since traditional classrooms often overlook pragmatic instruction, chatbots could fill this gap by simulating real-life scenarios. The study aims to assess chatbot effectiveness and limitations in fostering second language pragmatic competence, offering practical insights for technology-enhanced language learning.

II. Literature Review

A. Speech Acts in Second Language Acquisition

(a). Theoretical Foundations

Speech act theory, introduced by Austin (1975) and later developed by Searle (1969), helps us understand how people use language not just to share information, but to do things—like make a request, apologize, or give a command. This theory claims that people use language not just as a tool to transfer information or to describe state of affairs, rather language can work as a source of actions which Austin (1975) named as speech acts. The theory demonstrates how people use language for action performance beyond basic information delivery by making requests and offering apologies and giving orders. It comprises of three fundamental parts that include the literal meaning of statements in the *locutionary act*, the interpreter's motive or the intended meaning of the message, known as the *illocutionary act* and the *perlocutionary act* that describes the listeners' response, or the impact on the listeners (Austin, 1975). These speech acts make the pragmatic effect in the language are effective in learning a second language (Kasper & Rose, 2002). As Kasper and Rose (2002) point out, developing pragmatic competence is essential for commutation in second language.

(b). Pragmatic Challenges in ESL Contexts

ESL students commonly make pragmatic mistakes that result in communication problems even when they produce correct grammatical sentences. According to Bardovi-Harlig (2015) users make pragmatic errors since they do not understand the social norms used to determine proper language interactions within different scenarios. Speech acts such as apologies, request and refusal work differently among, languages cultures and social norms. As a result, students fail to master speech acts correctly when they are learning their second language (Taguchi, 2019). Chong-yuan (2021) claims that instructional approach is necessary to teaches speech act strategies according to the need of second language learners. Nevertheless, traditional ESL education systems lack adequate access to genuine communication scenarios so language students find it difficult to build their pragmatic language skills. Cohen (2018) points out that although ESL programs usually put a lot of emphasis on teaching grammar and vocabulary; they tend to give much less attention to pragmatics. As a result, students often struggle to handle everyday communication in real-life situations, where knowing how to use language appropriately is just as important as knowing the rules.

B. AI-Powered Chatbots in Language Learning

(a). Interactive and Personalized Language Tools

Language learning benefits extensively from artificial intelligence (AI) developments that have introduced chatbots as core elements to advance this process. Chatbots improve human interaction by applying NLP components with ML algorithms to provide learners with real-time feedback according to their proficiency levels (Fryer & Bovee, 2016). Such technologies allow the chatbots to check the learner inputs that the bot uses in adjusting the outputs according to the language skill level of each student. AI chatbots become a flexible and students' personal substitute, as opposed to non-adaptable standardized ways that were present before (Akpan et al., 2025). AI chatbots show their key strength by tailoring to the language level of their users their response complexity as well as their tone and style of writing (Zhang & Huang, 2024). AI chatbots learn to change their responses according to learners' level, providing simple feedback for a beginner and deeper conversations with a more advanced user (Ishihara & Cohen, 2021). This flexibility enables them to cater for students at any point during development of language by providing just the right challenge. Since neither too easy nor too difficult, students will motivate themselves more to continue learning at a moderate rate and become better linguistically.

The availability of AI chatbots extends beyond standard business hours because they deliver language practice support accessible at any time from (Li et al., 2024). This availability of AI chatbot platforms benefits particularly students who lack immediate access to native speakers or classroom learning options. Thus, through on-demand practice sessions students can freely participate in authentic conversations at any time using their preferred pace during unstructured time periods (Akpan et al., 2025). In addition, this automated accessibility provides important support for both sustained motivation and language learning because students can practice regularly while feeling no pressure in their practice sessions (Li et al., 2024).

(b). Supporting Pragmatic Development

AI chatbots excel at teaching linguistic appropriateness across culture and society as well as language foundation skills to students who learn English as a second or foreign language. The understanding of language relationships and politeness along with social intentions forms an essential part of language acquisition as defined by pragmatic principles (Zhang & Huang, 2024). ESL learners need to master performing cultural acceptable speech acts especially requests, apologies and refusals in order to be proficient.

Students who practice with chatbots show noticeable improvement in how they carry out speech acts in ways that reflect proper social and cultural norms. Zhang and Huang (2024) discovered that ESL learners using chatbots during their training improved in making polite requests and making appropriate refusals. This progress happens partly due to the fact that the chatbot provides rapid feedback, allowing learners to figure out if they have applied the speech act correctly (Rajabia et al., 2015; Hockly, 2023). Getting immediate feedback from teachers allows students to make immediate adjustments with their language use (Sykes & Dubreil, 2019). Such immediate correction teaches them how to vary the speech in order to adapt to various social settings. This way, the students acquire stronger pragmatic skills and are more ready to apply the appropriate communication in the actual-life interaction.

Furthermore, AI chatbots reduces students' anxiety where students practice their speech acts repeatedly and develop their pragmatic skills (Rapp et al., 2021). With chatbot interactions learners feel comfortable as they do not experience social rejection or embarrassment that happens in traditional classrooms. This protective environment promotes student confidence in their verbal skills thus speeding up their pragmatic competence development (González-Lloret, 2019). In addition, AI chatbots possess the capability to create numerous interactive real-life interactions such as colleague negotiations, apologies and formal requests. Moreover, Virtual scenarios through AI chatbots enable students to absorb foreign social conventions and secondary expressions that enable successful international communication (Brummernhenrich et al., 2025).

(c). Task-Based and Scenario-Based Learning

Chatbots are particularly effective in task-based and scenario-based language learning, as these approaches simulate real-life situations, making language use more meaningful. Through activities such as booking a hotel room, making workplace apologies, or ordering food, learners practice language in realistic settings, which helps them develop both linguistic and pragmatic competence (Li et al., 2025). These scenarios support learners in interpreting social cues and adapting to different communication contexts, effectively bridging the gap between theory and practical use (Li et al., 2024).

Despite their promise, chatbots in task-based environments face challenges. They sometimes produce irrelevant or inappropriate responses (Chao et al., 2021; Lockhart, 2024). However, advancements in Natural Language Processing (NLP) and machine learning are improving chatbot responsiveness and contextual understanding. Chatbots also reduce speaking anxiety—a key barrier in second language learning—by offering a low-pressure environment where learners feel safe practicing without judgment (Rapp et al., 2021). This encourages greater engagement and risk-taking in language use (Wang et al., 2024). From a sociocultural perspective, chatbots align with Vygotsky's Zone of Proximal Development (ZPD), acting as digital mediators that provide scaffolded support, enabling learners to perform beyond their current capabilities (Vygotsky, 1978).

C. The Role of Chatbots in Teaching Speech Acts

Ability for language learners to use language appropriately in different social contexts, known as socio-pragmatic competence, are transformed through AI-powered chatbots. According to Kasper and Rose (2002), and Taguchi (2015), the study of Socio-pragmatics explains that our linguistic decisions are based on context, tone as well as our social relation in a given situation. Chatbots that react to learners as a simulated interactive dialogue, therefore, provide learners with appropriate training of developing their core socio-pragmatic skills that allow them to communicate effectively in real-time (O'Grady, 2023). AI-driven tools use the generated data of user responses to modify their system responses and help learners to have better comprehension of how the combination of formality and politeness with social distance affects communication (Sykes & Dubreil, 2019). Chatbots allow students to establish connections between correct language usage and practical language performance through their dynamic interactive systems.

O'Grady (2023) explains that AI chatbots provide powerful capability for simulated speech act performance within formal as well as informal social contexts. Through this system students learn which language adjustments depend on the social position of their communicator and their connection to others in addition to the level of formality present in the situation (Li et al., 2024; Eslami-Rasekh et al., 2004). A workplace request needs formal expression along with

indirectness but these requirements reduce when speaking with friends and peer colleagues. Using advanced natural language processing (NLP) technology chatbots adjust their responses automatically after receiving user input to generate custom learning interactions (Labadze et al., 2023).

The ability of learners to adopt different levels of indirectness and tone during scenario-based dialogues helps them develop their socio-pragmatic competence. Taguchi (2024) proves that specialized techniques help students acquire pragmatic skills because they need to reshape their language performance based on roles and communication targets. The simulated professional environment in chatbots allows learners to practice proper indirect and formal language while informal interactions create exposures to casual speech forms.

Chatbot feedback in real time functions as a key tool to develop proper language utilization among students (Kasper & Rose, 2002). The immediate feedback system enables learners to enhance their pragmatic strategies including correct usage of both politeness markers and hedging devices along with formal expressions (Hockly, 2023; Ishihara & Cohen, 2021). The immediate feedback given to learners enables better acquisition of socio-pragmatic norms to increase their ability to match messages to appropriate communication contexts. AI chatbots serve as practical scalable systems which improve pragmatic ability most substantially regarding speech act proficiency and socio-pragmatic ability recognition.

D. Limitations and Challenges

(a). Incomplete Pragmatic Modeling

The extensive advantages of AI-powered chatbots exist while they remain limited in their ability to model pragmatic behavior in a complete manner. Based on a study conducted by Zaghlool and Khasawneh (2023), the processing power of AI should not be mistaken for human-level understanding, as even advanced AI systems, while excelling at language processing, lack the ability to interpret indirect speech acts, sarcasm, humor, and culturally specific taboos.

A chatbot can produce correct grammatical apologies yet it remains unable to properly demonstrate proper sincerity or formal propriety needed in specific conversation situations. The specific technical restriction poses severe issues when using such systems to accomplish essential cultural communication tasks like offering advice or expressing regret or utilizing humor for request mitigation (Taguchi, 2015).

The social rules of pragmatic conduct prove challenging for chatbots to understand in their operations. When communicating in formal situations individuals should use indirect polite words which differ from how they would communicate casual requests (Searle, 1969). A chatbot system responds directly to the same requests regardless of context which leads to misconduct of social rules regarding politeness and respect (Zaghlool & Khasawneh, 2023). This situation proves that although chatbots serve beneficial functions they cannot substitute human communication for developing the pragmatic abilities required to speak French. Regardless of their technological complexity AI systems face challenges in recreating the detailed explanations as well as practical teaching examples that human educators successfully deliver (Cohen, 2018).

The interpretation of chatbot responses becomes unclear to learners when AI systems lack capabilities to model proper indirectness alongside cultural understanding (Taguchi, 2019; Chong-yuan, 2021). Decades later it was observed that learners might conclude all communication requires directness because chatbots provide straightforward answers to linguistic queries (Bardovi-Harlig, 2015). According to Zaghlool and Khasawneh (2023) chatbots function best as secondary aids to learn pragmatics but should not serve as the main approach for skill acquisition.

(b). Cultural and Linguistic Authenticity

One major challenge in using AI-based chatbots for language education lies in their limited ability to provide culturally and linguistically authentic interactions (Bardovi-Harlig, 2015; Cohen, 2018). Most chatbots are trained on Western English language models, which reflect Western norms of politeness, gender roles, and social hierarchy (Tao et al., 2024). These norms often differ from those of non-Western learners, leading to miscommunication and inappropriate language use. Students may struggle to adapt their responses when Western standards conflict with their own cultural values (Tao et al., 2024).

While chatbots can simulate conversation, they often lack the depth of cultural sensitivity needed to replicate real-life communication. Pragmatic features such as directness or indirectness vary across cultures and affect how learners make requests, apologies, or refusals (Taguchi, 2015). When these cultural nuances are not reflected in chatbot dialogue, students receive limited opportunities to practice authentic communication.

To address this, educators must combine chatbot tools with explicit instruction in socio-pragmatic norms and cultural awareness (O'Grady, 2023). This dual approach prepares students for intercultural communication. Although some evidence supports chatbots in teaching polite requests and refusals, more research is needed on their handling of complex speech acts like humor and sarcasm. Future studies should focus on improving chatbot realism, especially for diverse cultural contexts.

III. METHOD

Research of mixed method design is conducted to investigate the effects of AI chatbots on the ability of students to make speech acts in English. This mixed method was used to provide a holistic picture on learner performance and experience in working with the chatbot on the basis of using both quantitative and qualitative data (Creswell & Plano

Clark, 2018). Quantitative data were collected using pre/post-test designed to measure change in pragmatic competence. Qualitative insights, although, were generated from Likert-scale questionnaires and semi-structured interviews to know about learners' perceptions and engagement with the chatbot.

A. Participants

The research involved 50 undergraduate students in English as a Second Language (ESL) courses. Stratified sampling was used by the researcher in order to have a balanced representation of language of proficiency levels. Study participants included A2 (Elementary) to B2 (Upper-Intermediate) levels according to the Common European Framework of Reference for Languages (CEFR). Their placement levels were determined through a standardized English test developed by Cambridge Assessment (2018), and these results were further supported by self-reported language background questionnaires. This approach helped confirm each student's proficiency level and ensured an accurate representation of learner diversity in the sample.

B. Pre-Test and Post-Test

To assess students' pragmatic skills before and after the intervention, the researchers used an established assessment framework based on Hudson et al. (1995). The test included a combination of:

- Discourse Completion Tasks (DCTs)
- Multiple-choice pragmatic judgment items
- Role-play scenarios

These tasks assessed participants' ability to produce contextually appropriate requests, apologies, and refusals. The analysis of the responses was conducted based on criterion of Blum-Kulka and Olshtain (1984) framework, which evaluates pragmatic appropriateness, grammatical accuracy, and sociocultural awareness. Inter-rater reliability was established through independent scoring by two trained raters, with discrepancies resolved through discussion.

C. Chatbot Interaction

The intervention spanned four weeks and utilized a social AI chatbot developed using Google Dialogflow, a platform leveraging Natural Language Understanding (NLU) to simulate realistic dialogues. The chatbot was designed to recognize and respond to speech acts involving requests, apologies, and refusals, offering both scripted interactions and open-ended dialogue opportunities. It provided the opportunity to practise real time communication in English. The chatbot delivered immediate, adaptive feedback on learners' responses, including suggestions for more contextually or pragmatically appropriate formulations. It was trained to identify and respond to routine speech acts involving the making of requests, offering apologies, and issuing of refusals. The system returned grammatically correct and pragmatically sensible responses which relied on the usage of Dialogflow's Natural Language Understanding (NLU) engine. Besides, the chatbot provided the learners with instant feedback. It pointed out some errors of the linguistics or pragmatics nature and recommended corrections. The availability of platform accessibility both on a computer and mobile tool helped the students to get involved with it regularly out of the class.

D. Questionnaires and Interviews

Following the intervention, all participants completed a Likert-scale questionnaire designed to evaluate their perceptions of the chatbot's effectiveness in improving pragmatic competence. The questionnaire assessed dimensions such as perceived usefulness, ease of use, motivation, confidence, and engagement. It interested the learners in learning the benefits and challenges of using the chatbot to learn the language.

To gain deeper insights into learner experience, semi-structured interviews were conducted with a purposive sample of ten participants representing various proficiency levels. Interviews focused on learners' impressions of the chatbot, perceived benefits, encountered challenges, and suggestions for improvement. The data were transcribed and analyzed using thematic analysis following Braun and Clarke's (2006) six-step framework, allowing for the identification of recurrent patterns and themes related to language development, affective engagement, and learning autonomy.

IV. RESULTS

The results of the study are divided into three major sections: statistical indicators of student performance, themes from the qualitative analysis, and learners' personal views concerning the use of the chatbot.

A. Quantitative Analysis

Student pragmatic competence was evaluated through the use of a paired-sample t-test, analysing the pre-test and post-test scores. After working with the chatbot system, the speech act performance of the students improved meaningfully as per test results.

Figure 1. Comparison of Pre-Test and Post-Test Scores

The pre-test scores averaged 58.4 (SD = 9.3) while post-test scores showed an average of 76.2 (SD = 8.7) as displayed in Figure 1. The study revealed a statistically meaningful difference ($t(49) = 8.73$, $p < 0.001$) which indicated students experienced a large improvement through chatbot training for pragmatic language usage. The results demonstrate that AI language learning systems produce greater achievements among students which improve their ability to communicate.

TABLE 1
BREAKDOWN OF SPEECH ACT PERFORMANCE

Speech Act	Pre-Test Mean Score	Post-Test Mean Score	Improvement (%)
Requests	60.2	33.7%	80.5
Apologies	55.8	29.5%	74.3
Refusals	59.3	24.6%	73.8

Table 1 provides in-depth analysis regarding how participants performed when using requests, apologies and refusals. The results of the study show that students made the most progress in making requests, with their performance improving by 33.7%. Improvements in giving apologies followed at 29.5%, while the ability to make refusals showed a 24.6% increase.

B. Qualitative Analysis

The qualitative analysis of semi structure interview of students' experiences revealed significant outcomes about interactions and instructional effects of students using the chatbot. The analysis revealed three primary findings: (1) Increase engagements and motivations, (2) Improved speaking confidence, and (3) Better awareness of polite language.

(a). Increased Engagement and Motivation

Students found chatbot interaction to be highly motivating and engaged them deeply according to their survey responses. Students found the interactive and unpredictable nature of chatbot conversations to be a major advantage over typical classroom activities, which often depend on repetition and scripted dialogues. The unpredictability of each exchange made the learning process more engaging. Since the chatbot responses weren't always predictable, students had to stay alert and respond in the moment—much like they would in real-life conversations—making the experience feel more genuine and stimulating.

Students found these engaging practice sessions through chatbots more compelling than the typical classroom learning exercises they dealt with. One participant shared:

"Chatbot is different every time. I cannot just memorize answers. I need to listen thoroughly before forming an opinion which leads me to speaking. It feels like real talking".

This shows that chatbots provide an engaging environment where students feel more engaged and more interactive. This engaging environment of the chatbots makes the conversation more flexible and natural than the role-plays where students follow fixed scripts. Here, students had to stay mentally engaged and think on their feet throughout the conversation as the chatbots responded in unexpected ways.

Another student drew a distinction between the communication experience through chatbots and traditional classroom teaching.

"In class, we practice the same dialogues again and again. But with chatbot, I don't know what it will say next. This makes me pay more attention".

This reveals that different conversational contents lead students to stay actively involved. Multiple presentations of identical dialogues make the environment boring for students in the learning process. Thus, students have to maintain high attention levels in their conversations as chatbots generate responses that remain unpredictable. This develops a

learning platform that provides education while making the process engaging so students can learn with pleasure and with a sense of natural comfort.

(b). Improved Confidence in Speaking English

Results demonstrated that, students developed greater English-speaking confidence as a result of learning through chatbot interaction. The chatbots practice enabled students to experience low anxiety with improved communication comfort levels. Since the chatbots provided a nonjudgmental environment, students felt more comfortable while speaking in without fear of being corrected or ridiculed.

For example, a student explained how chatbot interactions reduced their anxiety:

"Before, when I spoke English, I felt very nervous. But chatbots don't laugh; they do not say I am wrong. I try again and again, and now I feel okay to talk to people".

This statement identifies one basic component in language learning anxiety, which revolved around the fear of being corrected or ridiculed. Students tend to avoid speaking in average classrooms since they are afraid of making mistakes before classroom participants and their teachers. Using chatbots students find themselves an environment where they are able to practise their speaking skills without any negative judgments or feedback.

The other student explained about how their anxiety over time has changed to the effective communication skills.

"The chatbot practice helped me build up my self-confidence as speaker. Though every once in a while I stumbled, I went on with my attempts because the chatbot did not scold me. I am more comfortable with my communication tool being English".

This indicates that these students' confidence could only be built by conversing with the chatbot platform more than once. Those who had made several visits to the chatbot overcame their initial reluctance, and, consequently, became more confident in real-life speaking scenarios.

(c). Better Awareness of Polite Language

The analysis revealed that students gained a better understanding of how to use polite language in English. The use of chatbots for English conversations showed students the appropriate language choice matters in proper conversation. At first most students kept their language direct and straightforward, but their grammatically correct statements contained insufficient polite elements needed for respectful communication. The chatbot system immediately offered directions to students regarding better methods of composing polite and suitable responses.

For example, a student explained that making requests required new phrasing.

"I used to tell the other person to give me the book. The chatbot instructed me through the statement, Say: 'Can you give me the book, please?' I started using please more often in my speech, thus making people respond better to my statements".

The use of simple speech markers such as "please" or "can you" in speech make people to communicate in a more polite way. Students got instant feedback from the chatbot which enhanced their language awareness with regard to their choices; hence they incorporate the proper politeness strategies into their daily conversations.

Another reported make or refusing invitations but in more tolerable way.

"Previously I would decline all invitations by saying, 'No, I cannot make it.' The chatbot utilized education to help me deliver the response 'I'd love to but have different preparations.' Friends understand when I declare my unavailability without hurting their feelings".

This is a pragmatic language skill in English necessary to give polite ways to refuse (in a soft conversational form). This shows how chatbots assisted them to learn what is right in social cases of refusal to offers through teaching them an alternative of refusing nicely.

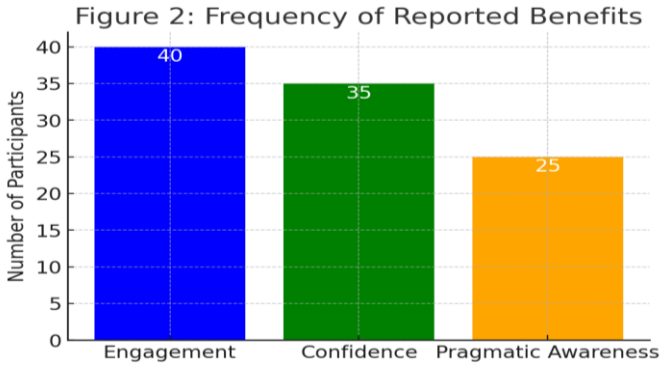

Figure 2. Frequency of Reported Benefits

Our results suggest that AI-powered chatbots offer valuable educational benefits by providing interactive learning experiences that foster stress-free conversations and promote social awareness. According to student feedback shown in Figure 2, the key advantage of using these tools for second language learning is the high level of engagement they create, highlighting the effectiveness of chatbots in language acquisition. Interviews with students revealed three main benefits

of chatbot-based learning: increased student engagement, higher motivation to learn, and improved English-speaking abilities, along with a better understanding of appropriate language use. The interactive nature of chatbot conversations went beyond traditional classroom activities, helping students build confidence in their speaking skills and enhancing their ability to use English correctly.

C. Student Perception and Satisfaction

A summary of students' perception and satisfaction ratings is provided in Figure 3, illustrating overall positive feedback with minor areas for improvement.

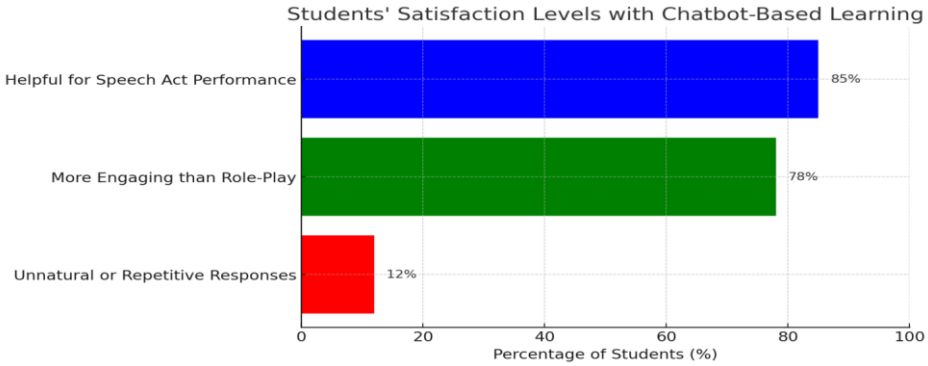

Figure 3. Students Satisfaction Levels

The post-intervention questionnaire was the instrument employed to evaluate students' satisfaction with chatbot-based learning experience. According to the results, (as shown in Figure 3) 85% of the respondents believed that the chatbot interaction was effective in helping them perform better in terms of speech act while78% of the participants felt that the chatbot was more engaging than traditional role-playing exercises. However, 12% of participants reported that the chatbot's responses were sometimes either unnatural or repetitive, and therefore further improvements in chatbot design would improve learning outcomes.

D. Summary of Findings

By applying the results of the findings, it can be stipulated that the AI powered chatbots really help to develop ESL learners' ability to perform speech acts effectively. The statistically significant data together with the student feedback indicates that the chatbot-based mode of instruction should be incorporated into a regular classroom. These results strengthen the evidence of the previous research that shows that AI tools increase pragmatic competence due to the provision of the opportunities for real-time interactive dialogue (Taguchi, 2019; Rapp et al., 2021). The immediate, context-aware feedback provided by chatbots helps learners develop a better understanding of appropriate language use, aligning with the work of Stickler (2022) and Zhang and Huang (2024), who emphasized that technology-driven learning fosters authentic communication. This study underscores the educational value of AI chatbots as effective tools for ESL students to acquire contextually relevant language skills, further validating González-Lloret's (2019) research on AI-based teaching systems in second language acquisition. Khan's (2020) study also supports these findings, demonstrating that non-judgmental learning environments can help reduce language anxiety. The ability of chatbots to improve speech act performance suggests their potential for integration into blended learning models, as noted by Rusmiyanto et al. (2023), while also acknowledging the challenges discussed by Lockhart (2024) regarding their handling of more complex conversational shifts.

V. Discussion

The research confirms that AI provides chatbot platforms for enhancing pragmatic skills of English as second language (ESL) students during speech acts (requesting, apology or refusal). The outcomes from the quantitative tests demonstrated an evident increase in scores in the students' learning who practised using a chatbot over four-week individualized learning for a blended learning approach. The results of the post-test showed enhanced quality and fluency with a courteous use of speech acts. Previous research on second language acquisition with AI driven tools supports the current findings on the development of pragmatic competence (Rusmiyanto et al., 2023; Stickler, 2022; Li et al., 2025). Scholars such as Kasper and Rose (2002) and Taguchi (2019) have long argued that mastering a second language involves more than just correct grammar-it also requires understanding social norms, politeness strategies, and using language appropriately in context. This study supports that perspective, demonstrating that if designed properly, digital learning tools can be successfully used to support the classroom learning by providing learners with interactive, flexible practicing options.

By creating an interactive practicing space using chatbot, students were able to enhance their use of speech acts because they got to play out real life conversation in a controlled environment. According to Vygotsky's (1978) sociocultural theory of second language acquisition students learn language competencies through interactive environment. According

to Kasper and Rose (2002), pragmatic competence develops through regular exposure to genuine communication situations. Students benefited from these interactions because traditional classroom lessons often focus more on grammar, while the chatbot allowed them to repeatedly practice real-life conversations and improve their ability to respond appropriately in different contexts. The findings match Taguchi (2024) regarding how digital tools aid pragmatic learning through immediate feedback and context-aware feedback which permits learners to modify their speech act strategies. Some students using the chatbot system reported difficulties adapting to unexpected conversational changes because AI tools struggle to properly mimic human discourse complexity as Lockhart (2024) has pointed out in his research. The results demonstrate better pragmatic accuracy among learners who used the chatbot indicating its value for developing ESL communicative skills.

As evidenced through qualitative data, the thematic analysis revealed that participants demonstrated improved abilities in recognizing and applying appropriate politeness strategies. The importance of politeness in language use is well documented in second language acquisition research, particularly due to the need for speakers to maintain face in social interactions—a concept central to Brown and Levinson's (1987) politeness theory. In this study, the interaction system offered participants structured examples of polite discourse, allowing them to observe and rehearse such strategies in a controlled, low-risk setting. Stickler (2022) demonstrated that technological exposure to authentic conversational structures helps students develop language awareness. Stickler (2022) supports this idea, arguing that technology-based encounters with authentic conversational forms can increase learners' metalinguistic awareness. Similarly, Zhang and Huang (2024) observed that ESL learners involved with dialogue-based systems developed greater sensitivity towards vocabulary usage leading to results that such kinds of tools enable development of the language along various aspects. Nonetheless, students also had some apparel reporting, especially regarding how it does not possess enough room to analyze the unconventional phrasing or shift its tone in real-time. These support the findings of Lockhart's (2024), that dialogue systems, although useful, are sometimes challenged by complexities such as sarcasm, humour or culturally specific language. A pragmatic skill requires the ability to manipulate these elements.

In addition, similar statements emerged from focus group discussions that participants became more confident speaking in their English after they interacted with the system. This proves that chatbots can serve better for such students who normally turn away from engaging in speaking English due to fear and anxiety over error-making. The students claimed that the chatbot platform built a "secure environment" for practice which avoided any fearful evaluations and this finding thus supports Krashen's (1982) theory about language learning spaces that reduce stress. With repeated use, learners became fluent, and became more confident in their ability to produce spontaneous speech. Rapp et al. (2021) also provide supporting evidence proving reduction of speaking anxiety by dialogic systems, as well as increasing confidence in communication. Some participants however commented that the interaction patterns appeared too scripted and did not possess the variance characteristic of human discourse. This highlights the necessity of supplementing digital tools with peer interactions and instructor-guided discussions to achieve well-rounded communicative competence.

From a pedagogical perspective, incorporating structured interaction tools into ESL instruction appears promising. Recent research strongly supports blended learning approaches, which combine digital tools with classroom-based teaching to enhance learning outcomes (Stickler, 2022). Students would achieve maximum learning success when blended learning employs classroom discussions alongside chatbot practice since it provides structured digital content together with genuine human interaction. When dialogue-based systems are used alongside human interaction, they can reinforce targeted language features while allowing space for more natural and unpredictable communication in class. This approach aligns with principles of computer-assisted language learning (CALL), which views technology as a complement rather than a replacement for traditional teaching (Chapelle, 2001). The integration of chatbot-based activities into ESL lesson plans enables tutors to organize adaptable learning areas which promote effective practice of pragmatic language skills throughout controlled interactive sessions.

Furthermore, language education through technology offers several advantages, it also presents technical and communicative limitations. Some commented on the system's rigid responses, which made it difficult to engage in more complex conversational exchanges. This aligns with Labadze et al. (2023), who demonstrate that chatbots lack versatility when it comes to sophisticated discourse patterns. Therefore, instructional staff should introduce strategies to help learners navigate these challenges effectively. The instructional team must teach effective strategies for managing chatbot shortcomings while students should examine their chatbot experiences to enrich the grasp of linguistic pragmatics. Reflective practices, as suggested by Rusmiyanto et al. (2023), can help students analyze their interactions with the system, identify response patterns, so they can distinguish common patterns thereby understanding chatbot restriction preparing them for more effectively in real communication scenarios.

Future developments of AI systems should concentrate on constructing better contextual understanding and adaptable responses to increase the effectiveness of chatbots for ESL learners. Advances in natural language processing offer potential solutions for making systems more responsive to varied and complex speech acts (González-Lloret, 2019). The support for diverse learners with multiple linguistic backgrounds can be enhanced when cultural context gets integrated into chatbot frameworks during their design phase. González-Lloret (2019) and Lockhart (2024) demonstrate the importance of building tools that can interpret users' intentions and modify their responses accordingly. The learning experience can become more comprehensive through improved chatbot interaction which includes voice recognition and contextual feedback mechanisms to diminish the difference between AI interaction and real human dialogues. Advanced

chatbot systems will achieve double functionality by delivering pre-programmed language practice and enabling learners to effectively interact with elements of pragmatics and communicative competence.

VI. Conclusion

Researchers investigated how AI-powered chatbots affect the pragmatic abilities of Pakistani university students studying English as a second language. The study focused on three pragmatic competences including, requests, refusals, and apologies. Students using chatbots in their learning activities showed improved performance in using speech acts appropriately and developed better understanding of politeness strategies which led to higher real-life communicative confidence. Students showed significant advancement in post-test evaluation scores which demonstrated their increased competence in fluency and appropriateness combined with politeness after spending four weeks with chatbots. The qualitative findings supported the analysis that learning English through chatbots interaction helped students form more positive attitudes toward language use, reduce anxiety related to verbal expression, and engage more willingly in communicative risk-taking. The research data matches academic findings which demonstrate the importance of AI-powered educational technology in language learning development. These findings align with broader research highlighting the benefits of digital tools in language learning, particularly in supporting the development of pragmatic competence. This study reinforces existing evidence that chatbots offer effective, structured environments for real-time dialogue practice, providing immediate feedback and contributing to overall communicative growth.

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