

Building Confidence Through AI Chatbot Usage and Interactions

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INTRODUCTION

Artificial intelligence has become an increasingly common part of everyday life, especially through the use of AI chatbots. These systems are designed to communicate with users through natural language, answer questions, provide suggestions, and provide support in educational, emotional, and social contexts. As AI chatbots become more human-like in their responses, users may begin to interact with them not only as digital tools but also as social companions. Phang et al. (2025) explain that the conversational style of systems such as ChatGPT, including their “ability to simulate human-like interactions,” can lead users to personify or anthropomorphize them. This development is important to study because young people are still developing their confidence, communication skills, and social identity.

One possible benefit of AI chatbot usage is that it may help youths build confidence in communication. Some young people may feel shy, anxious, or afraid of being judged when speaking to teachers, classmates, parents, or peers. In this situation, chatbots may provide a safer and less intimidating space for them to practise expressing their thoughts. Suriano, Fabio, and Plebe (2025) note that chatbot interaction can offer “interaction without judgment and without social pressures,” which may reduce anxiety and create a more comfortable communication environment. This suggests that AI chatbots may support confidence by allowing users to ask questions, explore ideas, and express emotions without the same pressure they may feel in face-to-face situations.

However, the use of AI chatbots also creates concerns about reduced human interaction. Human communication involves body language, tone of voice, empathy, disagreement, emotional awareness, and unpredictable responses. These elements are important in developing real-world confidence and social skills. Malfacini (2025) identifies two major concerns regarding companion AI: the “replacement concern” and the “deskilling concern”. The replacement concern refers to the possibility that AI may satisfy users’ social and emotional needs to the point that it replaces human relationships. The deskilling concern refers to the possibility that people may become less prepared for real relationships because AI interactions often require less emotional effort than human relationships.

Recent research also shows that the effect of AI chatbot usage is complex and depends on how the technology is used. Phang et al. (2025) found that most users interact with ChatGPT in neutral or task-oriented ways, but they also observed that “very high usage correlates with increased self-reported indicators of dependence”. This means that AI chatbots may be helpful when used moderately, but excessive use may create risks, especially if users begin to rely on them too heavily for emotional support or social comfort. Therefore, AI chatbot usage should not be viewed as entirely positive or entirely negative. Instead, it should be studied as a tool that can either support or weaken youth confidence depending on how it is used.

This study uses a qualitative content analysis method by examining existing scientific papers and academic discussions related to AI chatbot usage, youth confidence, emotional attachment, and human interaction. Rather than collecting new data through surveys or interviews, this study analyzes previous research to identify common themes, benefits, and risks. The analysis focuses on two main areas: how AI chatbots may improve confidence among youths, and how they may also create problems by reducing real-life interaction with others.

Therefore, this paper explores the benefits and risks of AI chatbot usage in improving confidence and shaping human interaction among youths. It aims to examine whether AI can support youth development by providing a

safe space for communication practice, while also considering whether overreliance on AI may weaken real-world social skills and reduce meaningful human relationships. This topic is important because AI is becoming more widely used, and understanding its effects can help youths, parents, educators, and policymakers encourage a healthier and more balanced use of AI technology.

LITERATURE REVIEW

AI Chatbot Usage Among Youths

AI chatbot usage has become increasingly common as conversational artificial intelligence systems are now used for education, communication, emotional support, entertainment, and personal guidance. Chatbots such as ChatGPT, Gemini, Replika, Character.AI, and other AI companion platforms allow users to interact with a system that can respond quickly, personally, and conversationally. For youths, this is especially important because they are often at a stage where confidence, identity, communication habits, and social belonging are still developing.

Phang et al. (2025) explain that general-purpose AI platforms such as ChatGPT, Claude, and Gemini are used for many purposes, including work, education, and entertainment. However, these systems are also becoming more human-like in conversation, which may cause users to treat them as more than tools. The study found that most users interact with ChatGPT in ordinary or task-based ways, but a smaller group of heavy users show more emotional or affective forms of interaction. This suggests that the impact of AI chatbot usage depends not only on whether people use chatbots, but also on how often they use them and what they use them for.

In educational settings, AI chatbot usage is often linked to learning support and student engagement. Parsakia (2023) notes that chatbots can provide personalized learning experiences, timely responses, and access to educational resources. This means that students are not limited to classroom time or teacher availability. They can ask questions, practise skills, and receive support at their own pace. Similarly, Ren, Stephens, and Lee (2026) found through a meta-analysis that AI has a “significant positive impact on self-efficacy” in learning contexts, showing that AI can influence students’ belief in their own ability to complete tasks.

AI chatbot usage can also take a more emotional or social form. Suriano, Fabio, and Plebe (2025) argue that ChatGPT’s immediate and personalized responses may encourage repeated use and emotional attachment. This point is important because young users may not only use AI for information, but also for reassurance, companionship, or emotional comfort. Therefore, AI chatbot usage should be understood as a broad variable that includes educational use, emotional use, social use, and habitual use.

AI Chatbots and Confidence Building

One of the strongest positive arguments for AI chatbot usage is that it may help build confidence. Confidence is connected to a person’s willingness to speak, ask questions, make mistakes, try again, and believe that they can improve. In traditional social or classroom settings, some youths may avoid speaking because they fear embarrassment, rejection, or criticism. AI chatbots may reduce this pressure by offering a safer space for practice.

Suriano et al. (2025) explain that chatbot interaction can offer “interaction without judgment and without social pressures” (p. 3185). This is useful for youths who may feel nervous when speaking to teachers, classmates, parents, or peers. Unlike human interaction, AI chatbot communication does not usually involve visible judgment, laughter, facial reactions, or social embarrassment. This can make it easier for users to express themselves, ask simple questions, or practise communication before facing real-life situations.

The confidence-building role of AI is also supported by studies in language learning. Abdelfattah et al. (2026) studied Omani English-as-a-foreign-language learners using AI conversational apps and found improvements in speaking proficiency, confidence, and anxiety reduction. Their study showed that learners benefited from repeated practice, pronunciation feedback, and a non-threatening environment. One participant even described

the AI as less intimidating because it “doesn’t laugh at me” when mistakes are made (Abdelfattah et al., 2026, p. 13). This shows how AI can reduce fear and encourage users to practise more freely.

AI chatbots may also support self-efficacy, which is closely related to confidence. Ren et al. (2026) define self-efficacy as a person’s belief in their ability to perform a specific task. Their meta-analysis found that AI can improve learners’ self-efficacy through personalized support, feedback, communication, and motivation. This matters because a youth who believes they can improve is more likely to try, persist, and participate. In this sense, AI chatbots may not directly create confidence by themselves, but they can provide the conditions that help confidence grow.

Malfacini (2025) also discusses the possibility of social upskilling through companion AI. Social upskilling refers to the development of better communication habits and stronger social ability. From this perspective, AI chatbots may serve as a practice space where socially anxious or isolated users can rehearse conversations, organize their thoughts, and become more comfortable with self-expression. This may be especially useful for youths who need a gradual bridge before engaging more confidently with real people.

Risks of AI Chatbots Toward Confidence Development

Although AI chatbots may help build confidence, the literature also shows that this confidence can become limited or dependent if AI is used excessively. Confidence developed through AI interaction may not always transfer into real-life communication. Speaking to an AI chatbot is usually easier than speaking to a person because the chatbot is patient, available, and predictable. Real human interaction, however, requires users to deal with disagreement, misunderstanding, body language, criticism, silence, rejection, and emotional complexity.

Phang et al. (2025) found that very high ChatGPT usage was linked with self-reported indicators of dependence. This does not mean that all chatbot use is harmful, but it suggests that heavy use may create risks for some users. If a youth becomes confident only when speaking to AI, but avoids human interaction, the confidence may remain trapped inside the digital environment. In other words, AI may help users feel safer, but safety alone does not always prepare them for real social challenges.

Yao, Qi, Sheng, Sun, and Zhang (2025) provide further support for this concern through their study of problematic AI chatbot use. They found that users with low self-esteem were more likely to develop problematic chatbot use, and that this relationship was mediated by social anxiety, escapism, and chatbot flow. Their discussion suggests that AI may become appealing because it gives users a sense of control and escape. However, this may also lead to what they describe as a “loss of self-reliance” (Yao et al., 2025, p. 2). For youths, this is an important concern because confidence should ideally develop alongside independence, not dependence.

Parsakia (2023) also presents a mixed view of chatbots and self-confidence. The review suggests that chatbots can improve self-efficacy, learning support, and engagement, but it also warns that over-reliance on chatbots for validation may weaken real human connections and individual confidence. This means AI can support confidence when used as a tool, but may harm confidence when it becomes the main source of reassurance.

Gaikar and Solunke (2026) similarly argue that AI can help users prepare for interviews, build self-confidence, and support skill development. However, they warn that excessive dependence on AI may reduce independent thinking, decision-making, creativity, and critical thinking. For youths, this suggests that AI should not become a replacement for effort, reflection, or real-life learning. Confidence built through AI should be tested and strengthened through human interaction, classroom participation, teamwork, and independent problem-solving.

AI Chatbots and Human Social Behavior

AI chatbot usage may also influence human social behavior. Social behavior refers to how people communicate, form relationships, seek emotional support, cooperate, and participate in society. In a positive sense, AI chatbots may help users express feelings, practise conversation, reduce loneliness temporarily, and feel heard when human support is unavailable.

Wyatt (2025) explains that AI companions can provide short-term emotional relief because users may experience perceived responsiveness, or the sense of “feeling heard.” This is important because some youths may not always have access to supportive friends, family members, teachers, or counsellors. In such situations, AI chatbots may provide temporary comfort and help users organize their emotions before speaking to another person.

Malfacini (2025) also notes that companion AI may support social behavior when it encourages users to practise openness, vulnerability, and communication. Some users may become more willing to discuss their feelings after first exploring them with AI. This suggests that AI can be helpful when it functions as a bridge toward human communication rather than a replacement for it.

Suriano et al. (2025) add that chatbot interaction may be less ambiguous and more manageable than human interaction because it removes many nonverbal communication demands, such as facial expressions and body language. This can be useful for individuals who struggle to read social cues. For some youths, especially those with social anxiety or communication difficulties, AI may provide a less stressful way to practise expression and social response.

However, the impact on social behavior depends greatly on the user’s purpose and level of reliance. If AI is used to prepare for human interaction, it may strengthen social development. If it is used to avoid human interaction, it may weaken social development. Therefore, the role of AI in society is not simply positive or negative. It depends on whether chatbot usage encourages users to return to real relationships or allows them to withdraw further from them.

Risks Toward Human Interaction and Society

The main social concern in the literature is that AI chatbots may reduce real-life human interaction. Malfacini (2025) identifies two important concerns: the “replacement concern” and the “deskilling concern.” The replacement concern refers to the possibility that AI may meet users’ emotional and social needs so well that they begin to replace human relationships with AI relationships. The deskilling concern refers to the possibility that people may become less capable of real relationships because AI communication requires less effort than human communication.

This concern is especially relevant to youths because social skills are developed through real practice. Human relationships require patience, compromise, empathy, conflict resolution, and emotional responsibility. AI chatbots, by contrast, are usually more available, agreeable, and responsive. If young users become used to this kind of interaction, they may find real people more difficult to deal with. Over time, this may reduce their willingness to engage in real-world conversations.

Wyatt (2025) also warns that AI companions should be treated as adjuncts to human connection rather than substitutes. The article explains that high-intensity, companionship-oriented use may be associated with higher loneliness, reduced time with people, and greater emotional dependence. This supports the concern that AI may provide short-term comfort while also reducing motivation to seek human connection.

Phang et al. (2025) reached a similar conclusion. Their findings show that high-intensity usage was associated with emotional dependence and lower perceived socialization. The study also found that longer usage and loneliness at the beginning of the study were connected with more affective use of ChatGPT. This suggests that people who already feel lonely or socially disconnected may be more likely to use AI emotionally, which can make it difficult to know whether AI reduces loneliness or simply attracts lonely users. Either way, the relationship between AI usage and social behavior appears complex.

Yao et al. (2025) also highlight the risk of problematic chatbot use. Their findings suggest that social anxiety, escapism, and chatbot flow can help explain why users with low self-esteem may become more dependent on AI chatbots. This is important for societal behavior because it shows that problematic AI use is not only about time spent online. It is also connected to emotional needs, avoidance, and the search for easier forms of interaction.

Gaikaar and Solunke (2026) expand this concern by arguing that AI affects social interaction with friends and family. Their study warns that overdependence on AI may reduce closeness, trust, emotional attachment, teamwork, and collaboration. They also raise ethical concerns related to privacy, data misuse, and responsible AI use. These issues show that the social impact of AI is not only personal, but also connected to wider questions about education, mental health, privacy, and human relationships.

Summary of Literature Gap

Overall, the literature shows that AI chatbots have both benefits and risks. On the positive side, they can support learning, self-efficacy, speaking confidence, emotional expression, and communication practice. They may be especially useful for youths who are shy, anxious, isolated, or lacking immediate support. Studies by Abdelfattah et al. (2026), Ren et al. (2026), Parsakia (2023), and Suriano et al. (2025) support the idea that AI can create a lower-pressure environment where users can practise, receive feedback, and build confidence.

On the negative side, the literature also shows that AI chatbot use can create problems when it becomes excessive, emotionally dependent, or socially avoidant. Phang et al. (2025), Yao et al. (2025), Wyatt (2025), Malfacini (2025), and Gaikaar and Solunke (2026) all raise concerns about dependence, reduced socialization, emotional attachment, avoidance, privacy, and weaker human interaction. These concerns are important because confidence should not only exist in private AI conversations, but also in real-life human settings.

A clear gap remains in the literature. Many studies focus on AI in education, adult users, language learners, general chatbot users, or companion AI users. However, fewer studies directly connect AI chatbot usage, youth confidence, and reduced human interaction in one framework. There is also limited research that examines both the positive and negative effects together. Therefore, this study aims to address this gap by reviewing existing literature through three main variables: AI chatbot usage, the pros and cons of AI in building confidence, and the pros and cons of AI in shaping human societal behavior. This balanced approach allows the study to examine AI not simply as a helpful tool or a harmful technology, but as a complex social and psychological influence that must be used carefully.

METHODOLOGY

Research Design

This study uses a qualitative content analysis review to examine the usage of AI chatbots in improving confidence and its possible effects on human interaction. Content analysis is suitable for this study because the research does not collect new data directly from respondents. Instead, it analyzes existing academic studies, journal articles, and research papers written by other authors. Through this method, the study identifies repeated themes, similarities, differences, and patterns in previous findings related to AI chatbot usage, confidence development, and human societal behavior.

The purpose of this method is to compare and cross-reference the results of selected studies based on the variables outlined in the literature review. These variables are AI chatbot usage, the pros and cons of AI chatbots in building confidence, and the pros and cons of AI chatbots toward human societal behavior. By reviewing existing literature through these categories, this study aims to develop a balanced understanding of whether AI chatbots can support youths in becoming more confident, while also considering the possible risk of reducing real-life human interaction.

Data Sources

The data for this study is collected from secondary sources. These sources include academic journal articles, review papers, meta-analyses, and empirical studies related to AI chatbots, self-efficacy, confidence, emotional attachment, social anxiety, companionship, and human interaction. The studies selected for review include research on ChatGPT usage, AI conversational apps, companion AI, problematic chatbot use, self-esteem, self-efficacy, and the psychological effects of AI.

The selected papers were chosen because they directly relate to the main focus of this study. For example, some studies discuss how AI chatbots can improve speaking confidence, learning self-efficacy, and emotional comfort. Other studies focus on the risks of overdependence, emotional attachment, loneliness, reduced socialization, and problematic AI chatbot use. This allows the study to compare both the positive and negative perspectives found in existing research.

Selection Criteria

The selected literature was chosen based on several criteria. First, the study had to focus on AI, AI chatbots, conversational AI, or companion AI. Second, the study had to discuss at least one of the main variables used in this paper, which are AI chatbot usage, confidence-building, self-efficacy, emotional support, social behavior, human interaction, or problematic use. Third, preference was given to recent studies published between 2023 and 2026, although relevant earlier studies may also be included if they provide important background or theoretical support.

Studies that were not directly related to AI chatbot usage, confidence, psychology, youth development, or social interaction were excluded. Sources that only discussed AI from a technical perspective without connecting it to human behavior, learning, or social impact were also not prioritized. This selection process helps ensure that the reviewed materials are closely connected to the research objective.

Variables of Analysis

The content analysis is organized around three main variables.

The first variable is AI chatbot usage. This refers to how users interact with AI chatbots, including the purpose, frequency, and emotional nature of the interaction. AI chatbot usage may include educational use, communication practice, emotional support, companionship, entertainment, or problem-solving. This variable is important because the impact of AI depends not only on the technology itself, but also on how people use it.

The second variable is the pros and cons of AI chatbots in building confidence. The positive side includes confidence-building through a safe and non-judgmental environment, repeated practice, personalized feedback, reduced anxiety, and improved self-efficacy. The negative side includes overdependence, limited real-world confidence, reliance on AI validation, avoidance of social challenges, and reduced independent thinking.

The third variable is the pros and cons of AI chatbots toward human societal behavior. The positive side includes emotional support, reduced loneliness, communication practice, and support for socially anxious individuals. The negative side includes reduced face-to-face interaction, emotional dependence, social isolation, weaker human relationships, and possible social deskilling.

Data Analysis Procedure

The analysis is conducted by reading and examining the selected studies according to the three main variables. First, each paper is reviewed to identify its main findings, arguments, and conclusions. Important points are then grouped under the relevant variable. For example, findings related to self-efficacy, speaking confidence, and anxiety reduction are categorized under the confidence-building variable. Findings related to loneliness, emotional attachment, dependence, and reduced socialization are categorized under the human societal behavior variable.

After the findings are categorized, the results from different studies are compared with one another. Studies that support similar conclusions are grouped together, while studies that present different or opposing findings are discussed as contrasts. This allows the paper to identify whether the literature generally supports AI chatbots as beneficial, harmful, or mixed in their effects.

The analysis also pays attention to repeated themes across the literature. These themes include AI as a safe space, AI as a confidence-building tool, AI as emotional support, AI as a source of dependence, and AI as a possible

replacement for human interaction. By identifying these themes, the study can explain the wider pattern of how AI chatbots may affect youths and social behavior.

Trustworthiness of the Analysis

To improve the trustworthiness of the analysis, the study uses multiple sources instead of depending on only one paper. This helps reduce bias and allows the findings to be compared across different contexts. The reviewed studies include different types of research, such as empirical studies, review articles, meta-analyses, and conceptual discussions. This variety strengthens the analysis because it allows the study to consider both statistical findings and theoretical arguments.

The study also uses clear variables to guide the review process. By organizing the analysis according to AI chatbot usage, confidence-building, and human societal behavior, the discussion remains focused and consistent. This prevents the review from becoming too broad and ensures that each selected study contributes directly to the research objective.

Ethical Considerations

Since this study uses secondary data from published academic sources, it does not involve direct human participants. Therefore, issues such as participant consent, privacy, and personal data collection are not directly involved. However, ethical academic practice is still important. All sources used in the study are properly cited to give credit to the original authors. The findings from previous studies are also presented carefully to avoid misrepresenting the authors' arguments or results.

Summary

In summary, this study uses a qualitative content analysis review to examine existing research on AI chatbot usage, confidence-building, and human societal behavior. By comparing and cross-referencing findings from selected studies, the research aims to understand both the benefits and risks of AI chatbot usage among youths. This method allows the study to provide a balanced discussion of AI as a tool that may improve confidence, while also recognizing its potential to reduce real-life human interaction if used excessively or dependently.

Analysis

Analysis of AI Chatbot Usage

The reviewed studies show that AI chatbot usage among youths and young adults is no longer limited to academic assistance or simple information searching. Instead, AI chatbots are increasingly being used for emotional support, companionship, self-expression, and personal advice. This is important because the role of AI has moved from being only a learning tool to becoming a social and psychological support tool.

McBain et al. (2025) found that 13.1% of adolescents and young adults in the United States had used generative AI for mental health advice when feeling sad, angry, or nervous. The percentage was higher among those aged 18 to 21, where 22.2% reported such use. Among those who used AI for this purpose, 65.5% sought advice at least monthly, and 92.7% found the advice somewhat or very helpful. These findings suggest that young people are already turning to AI in moments of emotional difficulty. This supports the argument that AI chatbot usage should not be studied only as a technological trend, but also as a form of emotional and social behavior.

Sun et al. (2026) also highlight the growing role of AI companions among adolescents. Their discussion shows that AI companions are being used for companionship, emotional support, serious conversations, and even romantic or flirtatious interactions. This shows that AI chatbot usage can become deeply personal, especially when the system is designed to respond with empathy, remember user information, and provide constant availability. For adolescents, this is significant because they are still developing identity, emotional regulation, and social relationships.

When these findings are compared with earlier literature, a clear pattern appears. AI chatbot usage has two major forms. The first is practical or utilitarian usage, where youths use AI for learning, study help, writing, information, or skill development. The second is emotional or socially supportive usage, where youths use AI for comfort, confidence, companionship, or self-disclosure. The second form is more sensitive because it may influence how youths understand communication, emotional support, and relationships.

Therefore, the analysis suggests that AI chatbot usage is a mixed variable. It can support learning and confidence when used as a tool, but it can also become emotionally significant when used as a substitute for human support. This makes the purpose and intensity of usage more important than usage alone.

Analysis of AI Chatbots in Building Confidence

The positive findings in the reviewed studies suggest that AI chatbots can help build confidence, especially when they provide a safe, private, and non-judgmental space for users. For youths who are shy, socially anxious, or afraid of making mistakes, AI chatbots may reduce the pressure that normally exists in human communication. This can make users more willing to ask questions, express themselves, and practise communication.

Studies on learning and self-efficacy support this view. Ren et al. (2026) found that AI had a significant positive impact on learners' self-efficacy in educational contexts. This is important because self-efficacy is closely connected to confidence. When learners believe they can perform a task successfully, they are more likely to try, persist, and improve. In the context of AI chatbot usage, this means that repeated interaction, instant feedback, and personalized responses may help users feel more capable.

Similarly, Abdelfattah et al. (2026) found that AI conversational apps helped improve speaking proficiency and confidence among EFL learners. The learners benefited from repeated speaking practice, lower anxiety, and more opportunities to practise outside the classroom. This supports the idea that AI can act as a practice space before users face real-life communication situations. In this way, AI chatbots can build confidence not by replacing human interaction, but by preparing users for it.

The analysis also shows that AI may be especially useful for socially anxious individuals. Li et al. (2026) found that college students with social anxiety may develop trust in AI systems because they perceive them as intelligent, safe, and less socially threatening. This supports the idea that AI chatbots may feel easier to interact with than people, especially for users who experience fear or discomfort in face-to-face communication.

From these findings, the main benefit of AI chatbots is not that they magically create confidence. Rather, they create conditions that make confidence easier to develop. These conditions include privacy, repeated practice, reduced fear of judgment, immediate response, and emotional reassurance. For youths, this can be useful when AI is used as a stepping stone toward real-world communication.

Analysis of the Risks to Confidence Development

Although AI chatbots can help build confidence, the reviewed studies also show that confidence gained through AI interaction may become problematic if users depend on AI too heavily. The issue is not simply whether AI makes a person feel more confident, but whether that confidence can transfer into real human situations. A youth may feel comfortable talking to AI but still feel anxious or unprepared when speaking to teachers, friends, classmates, or family members.

Yao et al. (2025) provide an important explanation for this risk through their study of problematic AI chatbot use. Their findings show that users with low self-esteem are more likely to develop problematic chatbot use, and that this relationship is influenced by social anxiety, escapism, and chatbot flow. This means that people who already feel insecure or socially uncomfortable may use AI not only for support, but also as a way to escape real-life difficulties. If this pattern continues, AI may reduce the user's motivation to face difficult social situations.

Vorac et al. (2026) also found that adolescents with low self-esteem reported higher levels of friend-like interaction with AI, stronger beliefs that AI could replace human relationships, more frequent emotional support

use, and stronger perceptions of AI as easier and safer than human communication. Although this study is a preprint and should be treated carefully, its findings are useful because they directly connect adolescent self-esteem with AI engagement. The pattern suggests that youths with lower confidence may be more likely to use AI emotionally and relationally.

This creates a concern about false confidence. AI interaction can feel safe because the chatbot is usually patient, responsive, and available. However, real human interaction includes disagreement, misunderstanding, criticism, rejection, body language, and emotional unpredictability. If youths only practise with AI, they may not fully develop the confidence needed for real social situations. Therefore, AI can support confidence only if it encourages users to move toward human interaction, not away from it.

Brunnlechner (2025) also provides a useful comparison from workplace research. The study found that AI usage can improve self-efficacy and performance, but it also raises concerns about overreliance and reduced independent effort. This idea applies to youths as well. If AI gives too much assistance, users may become less willing to think independently, solve problems on their own, or take social risks. Confidence should involve growth and independence, not only comfort and reassurance.

Analysis of AI Chatbots and Human Societal Behavior

The reviewed studies show that AI chatbot usage can affect human societal behavior in both positive and negative ways. On the positive side, AI chatbots may provide emotional support when human support is unavailable. They may help lonely, shy, or anxious users express themselves and organize their thoughts. In some cases, AI may serve as a temporary support system that helps users cope with stress or prepare for real human interaction.

Yoo et al. (2026) found that participants with lived experience of depression valued mental health chatbots for emotional validation, informational support, and a judgment-free space. However, participants also emphasized that AI could not replace human connection. This is an important finding because it shows that users may appreciate AI support while still recognizing its limits. The study suggests that AI chatbots should be designed as complements to human support, not replacements for human care.

Sun et al. (2026) explain this issue through two competing ideas: the stimulation hypothesis and the displacement hypothesis. The stimulation hypothesis suggests that AI companions can create opportunities for identity exploration, emotional expression, and social skill practice. In this view, AI may help youths become more socially prepared. The displacement hypothesis, however, suggests that AI interaction may replace human interaction, leading to time displacement, psychological dependence, and unrealistic relationship expectations. These two views help explain why the effects of AI are not always the same for every user.

Liu, Pataranutaporn, and Maes (2025) also found that companion chatbot use can produce different outcomes depending on the user. Some users may experience improved social confidence, while others may experience emotional dependence or social withdrawal. This shows that the effect of AI is not determined only by the chatbot itself. It is also shaped by the user's loneliness, social network, personality, and reason for using the chatbot.

The analysis therefore suggests that AI chatbots can either support or weaken societal behavior. If AI helps users reflect, practise, and reconnect with others, it can support social development. If AI becomes the main source of companionship and emotional validation, it may reduce real-life interaction and weaken social skills.

Analysis of Risks Toward Human Interaction

The strongest concern across the reviewed literature is that AI chatbots may reduce human interaction when users begin to prefer AI over real people. This risk is especially important for youths because adolescence is a period where social skills, emotional understanding, and relationship habits are still developing.

Malfacini (2025) discusses this through the ideas of replacement and social deskilling. Replacement occurs when AI begins to take the place of human relationships. Social deskilling occurs when users lose or fail to develop the skills needed for real relationships because AI interaction is easier and less demanding. Human relationships require patience, compromise, empathy, emotional responsibility, and the ability to handle conflict. AI chatbots may provide comfort, but they do not fully require the same level of emotional effort.

Yoo et al. (2026) support this concern by showing that users wanted emotional validation from AI but still recognized the need for human connection. This means that AI can be useful during moments when human support is unavailable, but it should not become the only source of emotional care. If a youth becomes used to always receiving quick, agreeable, and personalized responses from AI, real people may begin to feel more difficult, slower, or less satisfying.

The findings from Yao et al. (2025) and Vorac et al. (2026) also show that vulnerable users may be at higher risk. Users with low self-esteem, social anxiety, loneliness, or weak social support may be more likely to turn to AI for emotional comfort. While this may help in the short term, it may also create a cycle where the user avoids human interaction and becomes more dependent on AI. In this case, AI does not solve the social problem but becomes a way to avoid it.

Gaikar and Solunke (2026) add that excessive AI use may reduce social interaction, teamwork, collaboration, critical thinking, and independent decision-making. Although their study discusses AI more broadly, the concern is relevant to chatbot usage. If youths rely too much on AI for answers, advice, and emotional reassurance, they may lose opportunities to develop important human skills.

Overall Interpretation

Based on the content analysis, the findings suggest that AI chatbot usage has both supportive and risky effects. The positive effects are strongest when AI is used as a tool for practice, learning, emotional reflection, and temporary support. In this role, AI can help youths build confidence by reducing fear, providing feedback, and allowing repeated practice. It can also help users express feelings when they do not yet feel ready to speak to another person.

However, the negative effects become more serious when AI is used as a replacement for human relationships. The reviewed studies repeatedly show concerns about emotional dependence, problematic use, reduced socialization, and social avoidance. These risks are stronger for users who already experience low self-esteem, loneliness, social anxiety, or limited human support.

Therefore, the key issue is not whether AI chatbots are good or bad. The more important question is how they are used. AI chatbots appear most beneficial when they function as a bridge toward real-world confidence and human connection. They become problematic when they function as a substitute for real people. For youths, balanced use is especially important because confidence and social behavior are still developing. AI should support that development, not replace the human experiences that make it possible.

CONCLUSION

This study examined the usage of AI chatbots in improving confidence among youths while also considering whether such usage may create problems by reducing real-life human interaction. Through a qualitative content analysis review, the paper compared findings from existing studies based on three main variables: AI chatbot usage, the pros and cons of AI chatbots in building confidence, and the pros and cons of AI chatbots toward human societal behavior. The overall findings show that AI chatbots cannot be understood as entirely beneficial or entirely harmful. Instead, their impact depends greatly on how they are used, how often they are used, and the emotional or social needs of the user.

The analysis shows that AI chatbots can support confidence-building in several ways. They provide a safe, private, and non-judgmental environment where youths can practise communication, ask questions, express emotions, and make mistakes without the fear of embarrassment. For socially anxious, shy, or less confident

youths, this type of interaction can reduce pressure and encourage self-expression. Studies on self-efficacy, speaking confidence, and AI-supported learning suggest that AI tools can help users feel more capable by offering repeated practice, immediate responses, and personalized support. In this sense, AI chatbots may function as a useful stepping stone for youths who are not yet comfortable communicating openly with others.

However, the findings also show that the benefits of AI chatbot usage can become risky when users depend on AI too heavily. Confidence built only through AI interaction may not always transfer into real-life situations, because human communication is more complex and unpredictable. Real conversations involve body language, disagreement, emotional responsibility, silence, criticism, and the possibility of rejection. If youths become used to AI systems that are always patient, available, and agreeable, they may find real human relationships more difficult or less appealing. This creates the risk of overdependence, false confidence, and avoidance of normal social challenges.

The study also found that AI chatbots may influence wider human societal behavior. On one hand, they may provide emotional support, reduce loneliness temporarily, and help users organize their thoughts before speaking to another person. On the other hand, excessive or emotionally dependent use may reduce face-to-face interaction, weaken social skills, and contribute to social isolation. The reviewed literature repeatedly suggests that vulnerable users, such as those with low self-esteem, social anxiety, loneliness, or limited offline support, may be more likely to use AI chatbots for emotional comfort. While this may help in the short term, it can also create a cycle where the user avoids human interaction and becomes more attached to AI.

Therefore, the main conclusion of this study is that AI chatbots are most beneficial when they are used as support tools rather than replacements for human relationships. They can help youths build confidence when used for practice, learning, reflection, and temporary emotional support. However, they become problematic when they replace real communication, reduce independent thinking, or become the main source of validation and companionship. For youths, this distinction is especially important because confidence, identity, and social behavior are still developing during this stage of life.

In practical terms, this paper suggests that youths should be encouraged to use AI chatbots in a balanced and guided way. Parents, educators, and policymakers should not reject AI completely, but they should also avoid treating it as a harmless tool without risks. AI can be useful in education, communication practice, and emotional reflection, but it should be paired with real-world interaction, classroom participation, peer communication, and human support. Future research should focus more specifically on youths and examine how AI chatbot use affects confidence and social behavior over time. More studies are also needed to understand when AI helps users reconnect with people and when it causes them to withdraw further from human relationships.

Overall, AI chatbots have the potential to support youth confidence, but only when they are used carefully and responsibly. Their value lies not in replacing human interaction, but in helping users prepare for it. A healthy approach to AI chatbot usage should therefore focus on balance: using AI as a bridge toward stronger confidence and better communication, not as an escape from the human relationships that remain essential to personal and social development.

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