

p-ISSN : 2708-2105 | e-ISSN : 2709-9458

DOI(Journal): 10.31703/gmcr  
DOI(Volume): 10.31703/gmcr/.2024(IX)  
DOI(Issue): 10.31703/gmcr.2024(IX.II)



**VOL. IX, ISSUE II, SPRING (JUNE-2024)**

# GMCR

**GLOBAL MASS COMMUNICATION REVIEW**  
HEC-RECOGNIZED CATEGORY-Y



Double-blind Peer-review Research Journal  
[www.gmcrjournal.com](http://www.gmcrjournal.com)  
© GLOBAL MASS COMMUNICATION REVIEW

### Article Title

## Chabot's as Entertaining Content for the Youth in Pakistan

### Global Mass Communication Review

p-ISSN: 2708-2015 e-ISSN: 2709-9458

DOI(journal): 10.31703/gmcr

Volume: IX (2024)

DOI (volume): 10.31703/gmcr.2024(IX)

Issue: II Spring (June-2024)

DOI(Issue): 10.31703/gmcr.2024(IX-II)

### Home Page

[www.gmcrjournal.com](http://www.gmcrjournal.com)

Volume: IX (2024)

<https://www.gmcrjournal.com/Current-issues>

Issue: II-Spring (June-2024)

<https://www.gmcrjournal.com/Current-issues/9/2/2024>

### Scope

<https://www.gmcrjournal.com/about-us/scope>

### Submission

<https://humaglobe.com/index.php/gmcr/submissions>

### Google Scholar



Visit Us



### Abstract

This study investigates the impact of chatbots as a form of entertainment on Pakistani youth. Chatbots have gained popularity for providing personalized and engaging experiences through conversational interfaces. However, limited research addresses their effects specifically as entertainment for young people in Pakistan. Utilizing a qualitative research approach, this study gathers in-depth insights from six purposively sampled Pakistani youth familiar with chatbots. Guided by social cognitive theories, entertainment education, and media influence frameworks, the research employs in-depth interviews and content analysis to explore participant's perceptions and interactions with chatbots. The findings reveal the potential benefits and drawbacks of chatbots as entertainment, highlighting their influence on youth behavior, attitudes, and information acquisition. Additionally, the results offer guidance for developing responsible digital entertainment platforms that consider cultural nuances and developmental needs. This study provides valuable insights for policymakers, educators, and content creators to thoughtfully integrate chatbots into the entertainment industry for Pakistani youth.

**Keywords:** Chatbot, Entertainment Effects, Media Consumption, Pakistani Youth Culture, Youth Behavior

### Authors:

**Nasim Ishaq:** Assistant Professor, Department of Communication and Media Research, School of Communication Studies, University of Punjab, Lahore Punjab, Pakistan.

**Tanveer Hussain: (Corresponding Author)** Assistant Professor, Department of Communication and Media Research, School of Communication Studies, University of Punjab, Lahore, Punjab, Pakistan.  
(Email: [tanveerlabar@gmail.com](mailto:tanveerlabar@gmail.com))

**Anoosha Fatima:** Graduate, Department of Communication and Media Research, School of Communication Studies, University of Punjab, Lahore, Punjab, Pakistan.

Pages: 42-52

DOI:10.31703/gmcr.2024(IX-II).04

DOI link: [https://dx.doi.org/10.31703/gmcr.2024\(IX-II\).04](https://dx.doi.org/10.31703/gmcr.2024(IX-II).04)

Article link: <http://www.gmcrjournal.com/article/A-b-c>

Full-text Link: <https://gmcrjournal.com/fulltext/>

Pdf link: <https://www.gmcrjournal.com/jadmin/Author/31rv1olA2.pdf>

Citing Article

04	<b>Chabot's as Entertaining Content for the Youth in Pakistan</b>						
	<b>Author</b>	Nasim Ishaq Tanveer Hussain Anoosha Fatima		<b>DOI</b>	10.31703/gmcr.2024(IX-II).04		
<b>Pages</b>	42-52	<b>Year</b>	2024	<b>Volume</b>	IX	<b>Issue</b>	II
Referencing & Citing Styles	<b>APA</b>	Ishaq, N., Hussain, T., & Fatima, A. (2024). Chabot's as Entertaining Content for the Youth in Pakistan. <i>Global Mass Communication Review</i> , IX(II), 42-52. <a href="https://doi.org/10.31703/gmcr.2024(IX-II).04">https://doi.org/10.31703/gmcr.2024(IX-II).04</a>					
	<b>CHICAGO</b>	Ishaq, Nasim, Tanveer Hussain, and Anoosha Fatima. 2024. "Chabot's as Entertaining Content for the Youth in Pakistan." <i>Global Mass Communication Review</i> IX (II):42-52. doi: 10.31703/gmcr.2024(IX-II).04.					
	<b>HARVARD</b>	ISHAQ, N., HUSSAIN, T. & FATIMA, A. 2024. Chabot's as Entertaining Content for the Youth in Pakistan. <i>Global Mass Communication Review</i> , IX, 42-52.					
	<b>MHRA</b>	Ishaq, Nasim, Tanveer Hussain, and Anoosha Fatima. 2024. 'Chabot's as Entertaining Content for the Youth in Pakistan', <i>Global Mass Communication Review</i> , IX: 42-52.					
	<b>MLA</b>	Ishaq, Nasim, Tanveer Hussain, and Anoosha Fatima. "Chabot's as Entertaining Content for the Youth in Pakistan." <i>Global Mass Communication Review</i> IX.II (2024): 42-52. Print.					
	<b>OXFORD</b>	Ishaq, Nasim, Hussain, Tanveer, and Fatima, Anoosha (2024), 'Chabot's as Entertaining Content for the Youth in Pakistan', <i>Global Mass Communication Review</i> , IX (II), 42-52.					
<b>TURABIAN</b>	Ishaq, Nasim, Tanveer Hussain, and Anoosha Fatima. "Chabot's as Entertaining Content for the Youth in Pakistan." <i>Global Mass Communication Review</i> IX, no. II (2024): 42-52. <a href="https://dx.doi.org/10.31703/gmcr.2024(IX-II).04">https://dx.doi.org/10.31703/gmcr.2024(IX-II).04</a> .						



# Global Mass Communication Review

[www.gmcjournal.com](http://www.gmcjournal.com)

DOI: <http://dx.doi.org/10.31703/gmcr>



Pages: 42-52

URL: [https://doi.org/10.31703/gmcr.2024\(IX-II\).04](https://doi.org/10.31703/gmcr.2024(IX-II).04)

Doi: 10.31703/gmcr.2024(IX-II).04



Cite Us



## Title

### Chabot's as Entertaining Content for the Youth in Pakistan

#### Authors:

**Nasim Ishaq:** Assistant Professor, Department of Communication and Media Research, School of Communication Studies, University of Punjab, Lahore Punjab, Pakistan.

**Tanveer Hussain: (Corresponding Author)** Assistant Professor, Department of Communication and Media Research, School of Communication Studies, University of Punjab, Lahore, Punjab, Pakistan.  
(Email: [tanveerlabar@gmail.com](mailto:tanveerlabar@gmail.com))

**Anoosha Fatima:** Graduate, Department of Communication and Media Research, School of Communication Studies, University of Punjab, Lahore, Punjab, Pakistan.

#### Keywords:

[Chatbot](#), [Entertainment effects](#), [Media consumption](#), [Pakistani youth Culture](#), [Youth behavior](#)

#### Abstract

*This study investigates the impact of chatbots as a form of entertainment on Pakistani youth. Chatbots have gained popularity for providing personalized and engaging experiences through conversational interfaces. However, limited research addresses their effects specifically as entertainment for young people in Pakistan. Utilizing a qualitative research approach, this study gathers in-depth insights from six purposively sampled Pakistani youth familiar with chatbots. Guided by social cognitive theories, entertainment education, and media influence frameworks, the research employs in-depth interviews and content analysis to explore participant's perceptions and interactions with chatbots. The findings reveal the potential benefits and drawbacks of chatbots as entertainment, highlighting their influence on youth behavior, attitudes, and information acquisition. Additionally, the results offer guidance for developing responsible digital entertainment platforms that consider cultural nuances and developmental needs. This study provides valuable insights for policymakers, educators, and content creators to thoughtfully integrate chatbots into the entertainment industry for Pakistani youth.*

#### Contents:

- [Introduction](#)
- [Research Objectives](#)
- [Chatbot in Entertainment Media](#)
- [Youth Engagement with Digital Technology in Pakistan](#)
- [Cognitive, Emotional, and Social Impacts of Media Consumption](#)
- [Methodology](#)
- [Chatbots in Pakistani Entertainment](#)
- [Virtual Assistants](#)
- [Consumption Pattern in Youth](#)
- [Interactive and Immersive Experiences](#)
- [Impact on Cognitive Abilities and Emotional Well-being](#)
- [Social Skills and Communication](#)
- [The Future of chatbot Entertainment in Pakistan](#)
- [User Feedback and Perceptions of chatbot Entertainment](#)
- [Ethical Considerations](#)
- [Findings](#)
- [Discussion](#)
- [Recommendations for Future Research](#)
- [References](#)

## Introduction

The rapid progress in artificial intelligence has enabled the extensive application of chatbots, particularly in the entertainment sector (Bhutoria, 2022). Chatbots have become a common feature of online activities for Pakistan's youthful, tech-savvy population, offering a unique chance to study their effects on the country's youth (Wang, 2022).

This study explores how chatbots affect Pakistani adolescents in the entertainment industry, looking at their popularity, frequency of use, and repercussions on cognitive, social, and emotional development (Wunderlich, 2021). It also takes into account the wider cultural and societal ramifications of employing chatbots for entertainment, highlighting the necessity of



striking a balance between the advancement of technology and the production of ethically sound media (Al-Ghamdi, [2021](#)).

Making judgments concerning chatbots' continuing use in the entertainment business requires an understanding of how they affect Pakistani young (Tadvi, [2020](#)). Ensuring a favorable impact on the development of adolescents is crucial in order to deliver a satisfying and delightful digital experience (Al-Ghamdi, [2021](#)). This work adds significantly to the global conversation on AI while also being beneficial to Pakistan.

### **Research Objectives**

- i. To investigate how young people in Pakistan feel about entertainment-oriented chatbots.
- ii. To investigate the effects of Chatbot as enjoyable material on Pakistani youth's emotional health.
- iii. To evaluate the impact of Chatbot as engaging material on Pakistani youth's social skills and communication abilities.

### **Chatbot in Entertainment Media**

With their pivotal roles in streaming services, video games, and interactive storytelling, chatbots have drastically changed how consumers interact with entertainment media (Fløstad and Brandtzaeg, [2020](#)). They make entertainment more engaging with personalized content suggestions, question-answering, and behind-the-scenes insights in streaming (Popenici and Kerr, [2017](#)). Chatbots are used as in-game guides and characters in video games, adding dynamic interactions to the gameplay experience (Seo et.al., [2021](#)). The distinction between passive and active media consumption is blurred when consumers participate in decision-making through interactive storytelling (Al-Ansari et al., [2020](#)).

Chatbots' increasing significance in the entertainment industry (Fløstad and Brandtzaeg, [2020](#)). They have an effect on information delivery and user engagement, particularly in education pertaining to entertainment (Popenici and Kerr, [2017](#)). Their ability to increase the amount of contact between students and teachers in online learning has consequences for enjoyment (Seo et.al., [2021](#)). Chatbots are essential for user

interaction and content customization on social media, highlighting the wider use of AI (Sadiku et.al., [2021](#)). These studies highlight the ways in which chatbots improve entertainment experiences and emphasize the necessity for the development of ethical AI.

### **Youth Engagement with Digital Technology in Pakistan**

In Pakistan, the youth's increased use of digital technology has become prominent, enabling communication, education, and entertainment (Zaheer, 2018). The widespread availability of affordable internet and smartphones empowers young Pakistanis to connect with the world, use social media like Facebook, Instagram, and TikTok for self-expression, and engage in online learning and e-courses. They also heavily rely on smartphone apps and digital games for leisure (Bhutoria, [2022](#)).

New media technology, particularly mobile phones and social networking sites, has profoundly impacted Pakistani youth (Zaheer, 2018). It has enhanced their social participation and political knowledge, making them more informed and politically engaged. However, concerns exist about excessive exposure to negative influences like pornography and potential social isolation from families (Bariş, [2020](#)).

According to research by Ida (2020), social media may greatly improve young people's political engagement and learning in Pakistan and Indonesia. These results highlight the intricate interactions between digital technology and Pakistani youth, where advantageous and disadvantageous outcomes coexist (Bechmann, Bowker, [2019](#)).

### **Cognitive, Emotional, and Social Impacts of Media Consumption**

Media usage affects social, emotional, and cognitive development in a big way (Chen et.al., [2022](#)). "Negative information" is the term used to describe material that has a negative influence on mental health during the pandemic; real-time impact assessment tools have been created for this content (Basri, [2020](#)). Cognitive variables such as performance expectations and hedonic incentives influence the adoption of AI devices in service

interactions (Gursoy et al., 2019). According to Lin and Wu (2023), social media brand chatbots have an impact on how customers and brands interact, which in turn affects social connection, information seeking, and brand engagement. The cognitive frameworks and theories employed in AI research are highlighted in a thorough evaluation of the literature in marketing, consumer research, and psychology (Mariani, Perez-Vega, and Wirtz, 2022). All of these studies show how complicated media consumption is, particularly in a society where artificial intelligence is becoming more and more prevalent.

### Methodology

A methodology gives researchers a structure for organizing their work, ensuring objectivity and transparency, and establishing the validity and generalization of their findings (Chang et al., 2022).

### Research Design

The research design for this study involves utilizing qualitative analysis, specifically focus groups and in-depth interviews, to explore how Pakistani youth perceive chatbots as a form of entertainment (García-Méndez et al., 2021; GarciaMendez). A purposeful sampling technique is employed to select diverse participants based on predetermined criteria. Thematic analysis was applied to identify recurring themes and patterns in the collected data. The research process prioritizes ethical considerations (Hasse et al., 2019). While the qualitative approach may not yield generalized results due to the limited sample size and sampling methodology, it provides valuable insights for future research in this area.

### Data Collection and Sampling

Data saturation, study goals, time and resource limitations, and contextual factors all affect the sampling size in qualitative studies (Karnouskos, 2020). In contrast to quantitative research, qualitative investigations strive for richness and depth of data. When new data no longer yields new insights, data saturation occurs. We gather enough different viewpoints from six persons and experiences to fully address the study topics while examining the effect of chatbots on Pakistani youth (Kerimbayev et al., 2022).

## Chatbots in Pakistani Entertainment

Chatbots have become an important tool in the entertainment sector in recent years, revolutionizing the way people interact with material and improving their experiences with entertainment in general (Laacke et al., 2021). In this part, we looked at Chatbot definitions and kinds, their function in the entertainment sector, and any advantages they could have as sources of amusing material (Han, 2019).

### Definition and Types of Chatbot

Virtual assistants or conversational agents, commonly referred to as chatbots, are computer programs created to mimic human dialogue and communicate with people via text or voice (Min et al., 2021). They employ natural language processing (NLP) and artificial intelligence (AI) techniques to comprehend user inquiries and deliver pertinent answers in a conversational style (Neururer et al., 2018)

There are different kinds of Chatbot, each with a particular function and degree of complexity:

#### Rule-Based Chatbot

Rule-based chatbots work according to a set of predetermined rules and patterns (Mokmin, Ibrahim, 2021). They adhere to a predetermined pattern and offer predetermined replies depending on keywords or phrases. These chatbots are suited for managing simple, predictable interactions since they are quite simple (Nadarzynski et al., 2021).

#### AI-Powered chatbots

In order to manage more complicated interactions, AI-powered chatbots use machine learning algorithms and NLP approaches (Nithuna & Laseena, 2020). They enable more natural and dynamic interactions by being able to comprehend user intent, context, and sentiment. Through ongoing training and data analysis, these chatbots gain knowledge and get better over time.

#### Virtual Assistants

Virtual assistants, like Apple's Siri, Amazon's Alexa, or Google Assistant, are sophisticated chatbots that can carry out a variety of activities in addition to providing entertainment. By

connecting with various apps and services, they may perform a variety of tasks, including information provision, timetable management, control of smart home devices, and other duties (Agarwal et al., [2019](#))

### **Consumption Pattern in Youth**

According to D'alfonso et al., (2017), chatbots are transforming the way media is consumed by Pakistan's technologically aware youth by offering immersive and engaging entertainment experiences. These AI-driven chatbots provide individualized and interesting material when integrated into social networking, gaming, and storytelling platforms (Rustamovna, [2020](#)). They are changing how the material is viewed and interacts with, obfuscating the distinction between conventional and technology-driven storytelling. Through their interactions with chatbots, young people in Pakistan are actively influencing the direction of digital entertainment, which is reflected in the shift in consumer patterns (Riley et al., [2021](#)).

### **User Preferences and Experiences**

The way that Pakistani young consume entertainment has been significantly impacted by technology. Some significant effects of technology include:

#### **Access to Content**

The young of Pakistan now have easier access to entertainment content because of technology (Srinivas et al., [2022](#)). Youth now have access to a variety of entertainment options whenever and wherever they choose because of the expansion of high-speed internet, reasonably priced cell phones, and streaming platforms.

#### **Personalization and Customization**

Technology makes it possible to create individualized and unique entertainment experiences. By using algorithms to make content recommendations based on user preferences, streaming platforms improve user pleasure and engagement (Sagar et al., 2021).

#### **Social Sharing and Engagement**

Technology, especially social media platforms, makes it easier for people to share and interact with entertainment material online (Sanghvi et al., [2021](#)). Pakistani youth regularly engage in fan groups by debating, exchanging ideas, and participating, which strengthens their sense of social connection and belonging.

### **Interactive and Immersive Experiences**

Interactive and immersive entertainment experiences are made possible by technology. The use of augmented reality (AR) and virtual reality (VR) technology has the potential to completely change how young people consume and interact with entertainment material (Tadvi et al., [2020](#)).

### **Content Creation and Participation**

Youth in Pakistan may now develop and take part in entertainment material because of technology (Väänänen et al., [2020](#)). Through websites like YouTube, Instagram, and SoundCloud, they may produce their own music, videos, and artwork and share it with a worldwide audience. Aspiring artists and content producers now have more chances as a result of this.

### **Effect on Cognitive Development**

The use of chatbots in Pakistan's entertainment sector helps young people's cognitive development. Through interactive exercises like tests and problem-solving situations, they encourage critical thinking, problem-solving, and decision-making (Vanichvasin, [2021](#)). Youth find learning to be entertaining and engaging when using chatbots as informal learning platforms. Moreover, their interactive quality improves focus and attention span, which is especially advantageous for people who struggle with attention. All things considered, chatbots are both entertaining and cognitively beneficial, and as their use increases, so too will their impact on cognitive growth (Wang et al., [2022](#)).

### **Impact on Cognitive Abilities and Emotional Well-being**

Chatbot entertainment has both positive and negative effects on brain function and mental health. On the positive side, interactive chatbots can enhance cognitive processes like decision-

making and problem-solving, offering educational benefits. However, excessive reliance on chatbots for amusement may reduce in-person social interactions and emotional connections, potentially leading to feelings of loneliness and decreased empathy (Dimitrijević et.al., 2019).

### **Impact on tension and Anxiety**

In Pakistan, young people's tension and anxiety can be reduced in part because of chatbots. It may be a type of escapism for users to interact with interesting chatbots, providing a little respite from the pressures of daily life. Additionally, chatbots created to teach users stress-reduction tactics, mindfulness exercises, or relaxation techniques can be very helpful in assisting users in properly controlling their levels of stress and anxiety (Yan, 2018).

In conclusion, chatbots in Pakistani entertainment are more than simply sources of entertainment; they also have a significant effect on people's emotional health. Chatbots have a varied role in improving the mental health of Pakistani youngsters, boosting their overall entertainment experiences by evoking emotional reactions, promoting psychological well-being, and providing stress-relieving techniques.

### **Effects on Social Development**

The social growth of Pakistan's young has been significantly impacted by the incorporation of chatbots into the entertainment industry. Interactions and connections, the growth of social abilities and communication, and the impact on social behavior are all examples of these consequences (Park & Kim, 2023).

### **Relationships and Interactions**

Chatbots have changed how young people in Pakistan engage and build connections online. Young people have the chance to model social relationships through chatbot-driven games, social simulations, and virtual friends. Although these connections might not be a replacement for in-person encounters, they help people feel connected and a part of the online community. Particularly among young people who participate in chatbot-driven communities and share similar interests,

chatbots have the potential to encourage digital friendships and relationships.

### **Social Skills and Communication**

Chatbots have evolved into tools for Pakistani youth to improve their social and communication skills. Effective communication and the expression of ideas are encouraged while interacting with chatbots, whether in gaming or narrative contexts. This is especially helpful for young people who might have trouble communicating face-to-face. Interactions with chatbots can increase one's self-confidence in speaking one's mind and help one build beneficial social skills that are transferable to real-world situations.

### **The Future of chatbot Entertainment in Pakistan**

In the upcoming years, it is anticipated that chatbot-based entertainment will continue to develop and grow in Pakistan. Chatbots will become more intelligent as a result of developments in AI and NLP technology, which will allow them to comprehend complicated user inquiries and offer dynamic, tailored replies. More immersive experiences and smooth integration with different entertainment media will result from this (Ouyang et al., 2022).

The youth demographic in Pakistan is increasingly utilizing messaging services and social media, which presents a chance for chatbot-based entertainment to expand its consumer base. With the help of games, interesting material, and personalized experiences, chatbots built within social media sites like Instagram, WhatsApp, and Facebook Messenger can engage a sizable user base.

With the use of games, narrative, content discovery, and interactive engagements, chatbot-based entertainment has already completely changed how consumers engage with entertainment material. Thanks to its successful case studies, potential for growth, and ability to provide young people with personalized, interactive, and engaging experiences, it has the potential to significantly impact Pakistan's entertainment business (Cooper, 2019).

### **Effects on Youth Engagement**



As it provides individualized and engaging experiences that grab their attention and promote active involvement, chatbot entertainment has a big influence on youth engagement. Youth are kept interested by chatbots' responsiveness and dynamic character, which encourages further participation and content discovery. chatbot entertainment piques interest and promotes repeat engagement, establishing a stronger relationship with the material by including gamified features, narrative, and interactive challenges. (Nelsen et.al., 2019).

### **User Experience and Engagement with Chatbot Entertainment**

Several elements, such as interface design, content relevancy, personalization, responsiveness, and simplicity of use, affect how Pakistani youth utilize chatbot entertainment. (Følstad et.al., 2020). It is important to take into account the following factors when assessing user experience:

#### **Interface Design**

For young engagement, a visually appealing and user-friendly interface is crucial. Chatbot user interfaces should be simple to use and offer simple navigation choices.

#### **Content Relevance**

The chatbot's material should be in line with the target audience's interests and preferences. Relevance and engagement may be increased by using interactive storytelling and personalized recommendations (Cheng, 2020).

#### **Personalization**

By personalizing the chatbot experience based on user preferences, previous interactions, and demographics, you can enhance engagement and give users a feeling of ownership. An experience that is more engaging and entertaining benefits from personalized replies and suggestions.

#### **Responsiveness**

chatbots should respond to user interactions and questions quickly and appropriately. Response time is essential for preserving user interest and preventing annoyance.

#### **Ease of Use**

The chatbot interface should be easy to use and comprehend, accommodating users with different degrees of technology knowledge. Interactions that are easy and hassle-free improve the user experience.

#### **User Feedback and Perceptions of chatbot Entertainment**

Because it provides information to content providers and raises user happiness, user engagement is essential to the progress of chatbot entertainment. Engagement is heavily influenced by user perceptions, therefore good impacts on behavior, engagement, social connections, and well-being require a balanced approach. User input and chatbot design are essential to its advancement. Even while chatbot entertainment can increase young participation, its effects on relationships and general well-being need to be carefully considered.

#### **Ethical Considerations**

In Pakistan, chatbot entertainment must prioritize ethical aspects. Data security and privacy safeguards need to protect user information in order to guarantee responsible implementation. Maintaining user autonomy requires openness and informed permission, particularly when using chatbot interactions to sway behavior and make decisions. Encouraging fairness in suggestions and preventing algorithmic bias are essential (Wunderlich, 2021). Adherence to cultural conventions, values, and societal boundaries in content selection is crucial to prevent user annoyance or alienation. Gender portrayal needs to be inclusive and non-stereotypical. It's important to promote a balance between online and offline contacts in order to avoid social isolation and reliance on chatbot conversations. In order to create and employ chatbot entertainment in Pakistan that is both entertaining and respectful of user trust and social well-being, it is imperative that these ethical issues be addressed (Trothen, 2022).

#### **Findings**

The interviews offer diverse insights into chatbots' impact on individuals' lives, revealing their integral role in daily routines, and providing

entertainment, companionship, and knowledge. Participants appreciate chatbots' convenience but acknowledge limitations, including the absence of genuine emotional connections. Responsible usage and ethical considerations are emphasized, with a cautious approach to technology dependency. Pakistani youth express enthusiasm for AI integration while highlighting the importance of human connections. These interviews highlight the multifaceted nature of chatbot interactions, with both benefits and challenges, shaping the evolving landscape of human-technology interaction.

## **Discussion**

The discussions from the above study interviews reveal a nuanced understanding of young people's perception of engaging with chatbots in Pakistan, aligning with the initial hypotheses while also highlighting some complexities and variations in the outcomes.

### **Positive Perception and Acceptance**

The interviews largely support the hypothesis that young people in Pakistan have a positive perception of engaging with chatbots. Interviewees recognize the convenience and utility of chatbots for various purposes, such as entertainment, companionship, creativity, and knowledge enhancement. The positive impact on mood, language proficiency, and problem-solving skills is evident from their experiences (Casillo et.al., 2020). This aligns with the hypothesis that young individuals view chatbots as a valuable resource, which has led to increased acceptance and integration of these AI-driven tools into their lives.

### **Mixed Effects on Emotional Health**

Conversations with chatbots have conflicting consequences on mental well-being, according to interviews. Positive results include enjoyment, relaxation, and stress release, which lend credence to the notion that interactive chatbots might improve mental health by providing entertainment and interaction. But there are other possible hazards, such as heightened feelings of social isolation and loneliness. Even while chatbots can be somewhat amiable, they might not be able to completely replace the requirement for real human connection. These interviews underline the

limitations of chatbot interactions and draw a contrast between genuine human encounters and technology-driven engagement (Kawasaki et.al., 2020).

### **Complexity and Responsibility**

The conversations highlight the complexity of chatbot interactions, recognizing their advantages and convenience in addition to any possible drawbacks like reliance and a decrease in human engagement. They stress the significance of using chatbots responsibly and striking a balance between human and AI interactions (Argal et al., 2018). Overall, the conversations lend credence to the theory that young people in Pakistan view engaging with chatbots positively overall, finding value in their convenience, usefulness, and ability to improve mood. However, they also acknowledge the mixed effects of these interactions on mental health, which emphasizes the need for responsible interaction in order to maximize benefits and minimize risks.

### **Recommendations for Future Research**

Several suggestions are drawn from the data to guarantee that young people in Pakistan utilize chatbots responsibly and profitably. First and foremost, it's critical to encourage responsible use by informing users about the moral application of chatbots and stressing the need to preserve real human interactions. Second, a focus on emotional well-being is necessary. This involves encouraging people to be aware of their emotional needs and supporting constructive coping mechanisms for stress and anxiety.

Additionally, human-like conversational skills should be improved in chatbot design, and capabilities that recognize and react empathetically to emotional cues should be added to provide a feeling of companionship and emotional connection. A more immersive and interesting experience may be produced by varying the interaction modes, including the auditory and visual components. This lowers the chance of social isolation.

Finally, it's crucial to promote critical thinking by telling users to double-check information from chatbots with other trustworthy sources. This prevents people from accepting AI-generated stuff

at face value while simultaneously encouraging critical thinking abilities. By minimizing possible hazards, these suggestions seek to optimize the

advantages of chatbot interactions (Galitsky et.al., [2019](#))

## References

- Al-Ghamdi, L. M. (January 2021). Towards adopting AI techniques for monitoring social media activities. *Sustainable Engineering and Innovation*, 3(1), 15–22. <https://doi.org/10.37868/sei.v3i1.121>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Al-Ansari, H., Gerwe, O., & Razzaque, A. (2020). Impact of artificial intelligence based social capital on civic engagement in an environment of changing technology: Development of a theoretical framework. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3659186>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Argal, A., Gupta, S., Modi, A., Pandey, P., Shim, S., & Choo, C. (2018, January). Intelligent travel chatbot for predictive recommendation in echo platform. In 8th annual Computing and Communication Workshop and Conference (CCWC), 2018 (pp. 176–183). *IEEE Publications*. <https://doi.org/10.1109/CCWC.2018.8301732>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Brandtzaeg, P. B., & Følstad, A. (2017). Why people use chatbots. In *Lecture Notes in Computer Science*. Springer, 10673, 377–392. [https://doi.org/10.1007/978-3-319-70284-1\\_30](https://doi.org/10.1007/978-3-319-70284-1_30)  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Boucher, E. M., Harake, N. R., Ward, H. E., Stoeckl, S. E., Vargas, J., Minkel, J., Park, A. C., & Zilca, R. (2021). Artificially intelligent chatbots in digital mental health interventions: a review. *Expert Review of Medical Devices*, 18(sup1), 37–49. <https://doi.org/10.1080/17434440.2021.201320>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Bhutoria, A. (2022). Personalized education and Artificial Intelligence in the United States, China, and India: A systematic review using a Human-In-The-Loop model. *Computers and Education*, 3, 2666–920X. <https://doi.org/10.1016/j.caeai.2022.100068>.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Bariş, A. (2020). A NEW BUSINESS MARKETING TOOL: CHATBOT. *DergiPark (Istanbul University)*. <https://doi.org/10.5281/zenodo.4030216>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Bechmann, A., & Bowker, G. C. (2019). Unsupervised by any other name: Hidden layers of knowledge production in artificial intelligence on social media. *Big Data and Society*, 6(1). <https://doi.org/10.1177/2053951718819569>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Basri, W. (2020b). Examining the impact of Artificial intelligence (AI)-Assisted social Media marketing on the performance of small and medium enterprises: Toward Effective Business Management in the Saudi Arabian context. *The International Journal of Computational Intelligence Systems/International Journal of Computational Intelligence Systems*, 13(1), 142. <https://doi.org/10.2991/ijcis.d.200127.002>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Cheng, Y., & Jiang, H. (2020). How do AI-driven chatbots impact user experience? Examining gratifications, perceived privacy risk, satisfaction, loyalty, and continued use. *Journal of Broadcasting & Electronic Media*, 64(4), 592–614. <https://doi.org/10.1080/08838151.2020.1834296>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Chen, M., Shen, K., Wang, R., Miao, Y., Jiang, Y., Hwang, K., Hao, Y., Tao, G., Hu, L., & Liu, Z. (2022), 16 pages. Negative information measurement at AI edge: A new perspective for mental health monitoring. *ACM Transactions on Internet Technology*, 22(3), 3, article 62. <https://doi.org/10.1145/3471902>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Chang, M. A., Philip, T. M., Cortez, A., McKoy, A., Sumner, T., & Penuel, W. R. (2022). Engaging youth in envisioning artificial intelligence in classrooms: Lessons learned. Rapid Community Report Series. *Digital Promise and the International Society of the Learning Sciences*. <https://repository.isls.org/handle/1/7670>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Casillo, M., Clarizia, F., D'Aniello, G., De Santo, M., Lombardi, M., & Santaniello, D. (2020). CHAT-Bot: A cultural heritage aware teller-bot for supporting touristic experiences. *Pattern Recognition Letters*, 131, 234–243. <https://doi.org/10.1016/j.patrec.2020.01.003>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Følstad, A., & Brandtzaeg, P. B. (2020). Users' experiences with chat-bots: Findings from a questionnaire study. *Quality and User Experience*, 5(1), 3. <https://doi.org/10.1007/s41233-020-00033-2>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Galitsky, B., & Galitsky, B. (2019). A content management system for chatbots. *Developing Enterprise Chatbots*, 253–326. [Google Scholar](#) [Worldcat](#) [Fulltext](#)

- Garcia-Mendez, S., De Arriba-Perez, F., Gonzalez-Castano, F. J., Regueiro-Janeiro, J. A., & Gil-Castineira, F. (2021). Entertainment Chatbot for the digital inclusion of elderly people without abstraction capabilities. *IEEE Access*, 9, 75878–75891. <https://doi.org/10.1109/access.2021.3080837>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Gursoy, D., Chi, O. H., Lu, L., & Nunkoo, R. (2019). Consumers' acceptance of artificially intelligent (AI) device use in service delivery. *International Journal of Information Management*, 49, 157–169. <https://doi.org/10.1016/j.ijinfomgt.2019.03.008>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Hasse, A., Cortesi, S., Lombana-Bermudez, A., & Gasser, U. (2019). Youth and artificial intelligence: Where we stand. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3385718>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Karnouskos, S. (2020). Artificial intelligence in digital media: the era of Deepfakes. *IEEE Transactions on Technology and Society*, 1(3), 138–147. <https://doi.org/10.1109/tts.2020.3001312>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding the role of artificial intelligence in personalized engagement marketing. *California Management Review*, 61(4), 135–155. <https://doi.org/10.1177/0008125619859317>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Kawasaki, M., Yamashita, N., Lee, Y. C., & Nohara, K. (2020, October). Assessing users' mental status from their journalism behavior through chatbots. In *Proceedings of the 20th ACM International Conference on Intelligent Virtual Agents* (pp. 1–8). <https://doi.org/10.1145/3383652.3423870>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Kerimbayev, N., Jotsov, V., Umirzakova, Z., Bolyskhanova, M., & Tkach, G. (2022, October). The use of chat-bot capabilities as A type of modeling in intelligent learning. In 11th International Conference on Intelligent Systems (IS), 2022 (pp. 1–8). IEEE Publications. <https://doi.org/10.1109/IS57118.2022.10019627>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Laacke, S., Mueller, R., Schomerus, G., & Salloch, S. (2021). Artificial Intelligence, Social Media and Depression. A new concept of Health-Related Digital Autonomy. *American Journal of Bioethics*, 21(7), 4–20. <https://doi.org/10.1080/15265161.2020.1863515>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Lin, J., & Wu, L. (2023). Examining the psychological process of developing consumer-brand relationships through strategic use of social media brand chatbots. *Computers in Human Behavior*, 140, 107488. <https://doi.org/10.1016/j.chb.2022.107488>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Min, F., Fang, Z., He, Y., & Xuan, J. (2021). Research on users' trust of chat-bots driven by AI: An empirical analysis based on system factors and user characteristics IEEE International Conference on Consumer Electronics and Computer Engineering (ICCECE), Guangzhou, China, 2021 (pp. 55–58). <https://doi.org/10.1109/ICCECE51280.2021.9342098>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Mokmin, N. a. M., & Ibrahim, N. A. (2021). The evaluation of chatbot as a tool for health literacy education among undergraduate students. *Education and Information Technologies*, 26(5), 6033–6049. <https://doi.org/10.1007/s10639-021-10542-y>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Mariani, M. M., Perez-Vega, R., & Wirtz, J. (2022). AI in marketing, consumer research and psychology: A systematic literature review and research agenda. *Psychology and Marketing*, 39(4), 755–776. <https://doi.org/10.1002/mar.21619>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Nadarzynski, T., Puentes, V., Pawlak, I., Mendes, T., Montgomery, I., Bayley, J., & Ridge, D. (2021). Barriers and facilitators to engagement with artificial intelligence (AI)-based chatbots for sexual and reproductive health advice: a qualitative analysis. *Sexual Health*, 18(5), 385–393. <https://doi.org/10.1071/sh21123>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Nithuna, S., & Laseena, C. A. (2020, July). Review on implementation techniques of chatbot. In International Conference on Communication and Signal Processing (ICCSP), 2020 (pp. 157–161). IEEE Publications. <https://doi.org/10.1109/ICCSP48568.2020.9182168>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Ouyang, F., Zheng, L., & Jiao, P. (2022). Artificial intelligence in online higher education: A systematic review of empirical research from 2011 to 2020. *Education and Information Technologies*, 27(6),

- 7893–7925. <https://doi.org/10.1007/s10639-022-10925-9>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 22. <https://doi.org/10.1186/s41039-017-0062-8>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Agarwal, T., Bharadwaj, V., Lakshmanan, R., Gao, X. Z., Poongodi, M., & Vijayakumar, V. (2019). Chat-Bot based natural language interface for blogs and information networks. *International Journal of Web Based Communities*, 15(2), 1. <https://doi.org/10.1504/ijwbc.2019.10021864>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Rustamovna, I. M. (2020). *Chat-Bot Development Business Prospects: MTS Case*.  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Riley, A. H., Sangalang, A., Critchlow, E., Brown, N., Mitra, R., & Nesme, B. C. (2020). Entertainment-Education Campaigns and COVID-19: How three global organizations adapted the health communication strategy for pandemic response and takeaways for the future. *Health Communication*, 36(1), 42–49. <https://doi.org/10.1080/10410236.2020.1847451>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Srinivas, K. K., Peddi, A., Srinivas, B. G. S., Vardhini, P. A. H., Prasad, H. L. P., & Choudhary, S. K. (2022). Artificial intelligence techniques for Chatbot applications. *2022 International Mobile and Embedded Technology Conference (MECON)*. <https://doi.org/10.1109/mecon53876.2022.9751887>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Seo, K., Tang, J., Roll, I., Fels, S., & Yoon, D. (2021). The impact of artificial intelligence on learner-instructor interaction in online learning. *International Journal of Educational Technology in Higher Education*, 18(1), 54. <https://doi.org/10.1186/s41239-021-00292-9>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Sadiku, M. N. O., Ashaolu, T. J., Ajayi-Majebi, A., & Musa, S. M., Artificial Intelligence in Social Media. 2708–7972 volume. *International Journal of Scientific Advances* ISSN. <https://www.ijscia.com/wp-content/uploads/2021/01/Volume2-Issue1-Jan-Feb-No.36-15-20.pdf>, 2 | Issue: 1 | Jan - Feb 2021  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Srinivas, K. K., Peddi, A., Srinivas, B. G. S., Vardhini, P. A. H., Prasad, H. L. P., & Choudhary, S. K. (2022b). Artificial intelligence techniques for Chatbot applications. *2022 International Mobile and Embedded Technology Conference (MECON)*. <https://doi.org/10.1109/mecon53876.2022.9751887>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Sanghvi, H. A., Pandya, S. B., Chattopadhyay, P., Patel, R. H., & Pandya, A. S. (2021). Data science for E-Healthcare, entertainment, and finance. *2021 Third International Conference on Inventive Research in Computing Applications (ICIRCA)*. <https://doi.org/10.1109/icirca51532.2021.9544885>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Tadvi, S., Rangari, S., & Rohe, A. (2020). HR Based Interactive Chat bot (PowerBot). *2020 International Conference on Computer Science, Engineering and Applications (ICCSEA)*. <https://doi.org/10.1109/iccsea49143.2020.9132917>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Väänänen, K., Hiltunen, A., Varsaluoma, J., & Pietilä, I. (2020). CivicBots – Chatbots for supporting youth in societal participation. In *Lecture notes in computer science* (pp. 143–157). [https://doi.org/10.1007/978-3-030-39540-7\\_10](https://doi.org/10.1007/978-3-030-39540-7_10)  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Vanichvasin, P. (2021). Chatbot development as a digital learning tool to increase students' research knowledge. *International Education Studies*, 14(2), 44. <https://doi.org/10.5539/ies.v14n2p44>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Wang, H., Gupta, S., Singhal, A., Muttreja, P., Singh, S., Sharma, P., & Piterova, A. (2022). An Artificial intelligence chatbot for Young People's Sexual and Reproductive Health in India (SNEHAI): instrumental case study. *JMIR. Journal of Medical Internet Research/Journal of Medical Internet Research*, 24(1), e29969. <https://doi.org/10.2196/29969>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Wunderlich, W. (2021, December). Chat bot concept for a social pain reliever. In *International Conference on Electrical, Computer and Energy Technologies (ICECET), 2021* (pp. 1–6). IEEE Publications. <https://doi.org/10.1109/ICECET52533.2021.9698554>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)
- Yan, R. (2018, July). 'Chitty-Chitty-Chat Bot': Deep learning for conversational AI. In *IJCAI*, 18. <https://doi.org/10.24963/ijcai.2018/778>  
[Google Scholar](#) [Worldcat](#) [Fulltext](#)