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Development of Speaking Skills through Online Gaming: A Case Study of Young PUBG Players in Pakistan

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Abstract

The online gaming culture, which is gaining worldwide popularity, has become a source of concern for parents, professionals, policymakers, and academicians due to its multi-pronged effects on youth. Prior research indicates that gameplay experiences, attributed to Massively Multiplayer Online Role-Playing Games (MMORPGs), can also positively impact the players by enhancing their decision-making, multitasking and coordination skills. It allows them to foster their ability to communicate with players. This study assessed the potential effects of Player Unknown's Battlegrounds (PUBG), an online gaming platform, on the development of English language speaking skills of youth in Pakistan. The study aimed to assess the role of language in the socialization and acquisition processes among young PUBG players, specifically through dialogue between native and non-native speakers. It also evaluated its effect on the potential development of their speaking skills. A survey questionnaire, based on 15 items, was developed to gauge the youth's speaking skills and their connection with online gaming. All the tool items showed good internal consistency (Cronbach's alpha = 0.78). A sample of two hundred and sixteen ($N = 216$) young PUBG players living in the Punjab province of Pakistan participated in the study. The majority of participants were male $N = 153(70.8\%)$, while the remaining were female $N = 63(29.2\%)$. The results of this study revealed that interactions on this gaming platform significantly affected the youth's speaking skills. The results also predict that playing online role-playing games can be beneficial for acquiring new skills, such as learning a new language.

Keywords: online games, Pakistan, PUBG, speaking skills, voice chat, youth

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Introduction

Technological transformation and the penetration of digital gadgets like smartphones and tablets, buoyed with high speed internet, into the routine activities of young people, is affecting many facets of their lives (Arif, [2018](#); Saeed et al., [2008](#); Sattar, [2007](#)). This easy accessibility of digital platforms is giving rise to the online gaming culture around the globe (Rankin et al., [2009](#); Yee, [2014](#)), and Pakistan is no exception. Given the ever-increasing number of young online gamers in society, this research aims to investigate how newly developed online games affect youth's speaking skills through their interaction and conversation with co-players. This study focuses on young players of an action video game called Player Unknown's Battlegrounds, commonly known as PUBG. This game has a huge worldwide fan following, and the number of its players is on the rise (Statista Inc., [2022](#); Xu et al., [2018](#)). This game concept is called 'Battle Royale' in which about a hundred players are set free on an island, and the last person/team alive wins (Krafton Inc., [2022](#)). For this, the players must gather arms, kill others, and beware of the danger zone to survive. It also has a voice chat feature that attracts youth's attention (Mamun & Griffiths, [2021](#); Sunil et al., [2021](#)). Young gamers spend their free time having fun and communicating with each other. The makers of the game claim that the influence of PUBG does not merely serve its purpose as a game, it is also a hub that connects players from all over the world and a brand that encourages players to live to their fullest (Krafton Inc., [2022](#)).

Experts have pointed out that playing computer games, discounting their negative aspects, positively changes youngsters' social life and learning activities (Granic et al., [2014](#); McGonigal, [2011](#)). It is reported that young people generally play video games in their leisure time, and it helps them create and develop friendships (Wright, [2011](#)). Many other positive outcomes of playing online games are also reported by researchers that include: Developing the minds of players and helping them solve complicated problems; developing their critical thinking and logic; training their brain to unravel riddles and quickly respond to sudden problems (Granic et al., [2014](#); McGonigal, [2011](#)). The players are also reported to learn the management of the controlled assets and make the best choices to utilize them when necessary (McGonigal, [2011](#)).

Computer games are disapproved by parents/guardians as a time-wasting and, mind corrupting pastime. And it is reported that playing

violent games is associated with violent and extremely anti-social behaviour (Aggarwal et al., [2020](#); Barr & Copeland-Stewart, [2022](#)). The scientific society has also cautioned that computer/video games change the structure and performance of the brain (Granic et al., [2014](#)). Contrarily, numerous researchers and psychologists have discovered that computer games can have numerous advantages. They make kids sharp and clever (Abarca & Mullan, [2012](#); Gałka & Strzelecki, [2021](#); Klimova & Kacet, [2017](#)). Playing online games is reported to help the users attain high-level thinking abilities that they will require in the later parts of their lives. (Howes et al., [2017](#)).

Conversations and messaging in games can help the players create a close rapport with each other. It can be energetic and allow them to mingle with each other, augment their lifetime value or transform into evangelists. Developers and publishers can get help from the in-game chatting, which are the parts or aspects of the game that are most profitable for their respondents if used for social listening. It can diminish stir and monetize new channels to monetize the game (Melhart et al., [2020](#)). Media play an important role in creating effects on minors as when they see violent and criminal acts on TV they react accordingly. So, media should not regularly broadcast violence as it harms children (Mahmood et al., [2021](#)). Online games not only engage or entertain the users but also help them learn the English language (Liu et al., [2021](#); Turgut & Irgin, [2009](#)). Online multiplayer games develop new social platforms, etiquette, social rules of conduct and ways of expression (Castronova, [2005](#)). Most online companies explicitly deal with aggressive and abusive behavior when it is reported by someone. Chat records and other social activities in the game are monitored and the player's history is analyzed to determine their behavior and offending characteristics. This methodology can be applied to similar gaming platforms, thus describing a valuable tool for game companies (Balci & Salah, [2014](#)).

Speaking requires constructive meaning that helps others process the information in a particular context or situation. It requires learners to produce specific language aspects such as grammar, pronunciation, or vocabulary and understand how and in what ways to produce language (Florez, [1999](#); Ramsey, [2017](#)). The transfer of information between humans performs many feasible functions. Giving or seeking affection, originating closeness or involvement, and developing feelings for another individual appear to be on each record of basic human affairs. These relational affairs

explain the cognitive and emotional bonds that develop the phenomenological feeling of being associated with others (Abbas et al., 2019; Liu et al., 2021). Through interaction, they (people) tell their feelings about themselves and their relationships on a smaller scale (Nawaz et al., 2020). This interaction has relational negotiations, which means not to do the relational settlement or bonding between them. With brief meetings, they will consider if they want to meet again or not. The consumer's social experience and the operator's game design promote their loyalty towards the PUBG game. The trust factor in the game is the main element, so gender plays a significant role in building trust and loyalty (Xu et al., 2018). Video games have become world popular and more advanced in technology as well. Online games help Japanese students learn new languages due to their ability to present aural and textual language (DeHaan, 2005).

It is reported that most of the Chinese students in the US cannot speak the English language, so they lag in classes in reading, writing and speaking the English language (Zheng et al., 2009). So, the Chinese are creating the multi-Virtual terrain for the scholars to help them learn the English language and share in the classes (Zheng et al., 2009). The chats and logs in the video games help the players learn the English language as it helps them communicate with each other. So, native English speakers and non-English speakers share the semantics and syntax; thus, a discourse arose that helps them learn the English language (Zheng et al., 2009). Through Massively Multiplayer Online Role-Playing Games (MMORPGs), players learn different things like language and socialization. These games encourage social learning through interpersonal communication and observing the small groups of players in the game. These games have embedded instrumental tools in their virtual environments that motivate the players to learn languages (Papargyris & Poulymenakou, 2005). MMORPGs provide social places for the players that help them in their communication process and problem-solving skills. The players use chat options to communicate with other players to improve the tasks and strengthen their foreign language skills to communicate with other players (Rankin et al., 2009). Public chat is used actively in PUBG and other games, and it helps them do multiple tasks and reshape quality of the chat discourse language (Herring et al., 2009).

Objectives of the Study

Following were the key objectives of this study:

- To analyze the role of PUBG in modifying the speaking skills of youth.
- To determine the youth's perception about in-game chatting in PUBG.

Research Questions

RQ1- How playing PUBG is affecting the speaking skills of youth?

RQ2- What is the perception of youth about the in-game chatting in PUBG?

Theoretical Framework

The theoretical framework of this study is based on the conceptions of Social Learning Theory by Albert Bandura (Anderson & Kras, [2007](#); Bandura, [1969](#)) and the PASS Cognitive Processing Model by Jack Naglieri, Jagannath Prasad Das, and John R. Kirby (Naglieri et al., [1990](#)). In Social Learning Theory, it is postulated that learning occurs when people observe the behavior of the people around them and try to imitate them (Anderson & Kras, [2007](#); Bandura, [1969](#)). This theory emphasizes the importance of observing, modelling, and imitating the behaviors, attitudes, and emotional reactions of others. It considers how both the environmental and cognitive factors interact to influence human learning and behavior (Anderson & Kras, [2007](#); Bandura, [1969](#)).

Likewise, the Planning, Attention-Arousal, Simultaneous and Successive (PASS) cognitive processing model links human cognition to specific neurological structures (Naglieri et al., [1990](#)). The PASS model describes human cognitive processes, such as learning a language and speaking it, within a framework of three functional units (Naglieri et al., [1990](#)). All the cognitive processes result in an ever-increasing base of knowledge which reflects "all information obtained from the cultural and social background of the individual because this determines the form of mental activity" (Naglieri et al., [1990](#)).

Experts have pointed out that the online platforms have provided an expansive environment that has the potential to offer instantaneous interaction with people worldwide" (Berson & Berson, [2005](#)). Online gaming is becoming an increasingly popular form of interpersonal communication, particularly among adolescents (Urquizo, [2020](#)). Since communication is a social event that emerges in response to human interaction, language is a cognitive process (Solso et al., [2005](#)). This study

aimed to understand this phenomenon in a digital environment where synchronous communication takes place in real-time scenarios.

In the light of the suppositions of the above-noted theory and model, this study aimed to understand the mechanism by which the speaking skills of youth are being affected by playing PUBG. It is observed that players spend a considerable amount of time playing PUBG, due to which they remember the related words. They believe that it would give them a reputation of the model by learning the behavior of the high-ranking players. The behavior, such as the words/phrases and the speaking style they adopt from the model, is of their choice no matter it is positive or harmful. Observers mainly adopt the behavior they find the most relative to their imaginary model. Different reasons for which the players need to communicate with other players are as follow:

- To talk with other players to tell them what actions to take in the game.
- Players communicate to clarify the game's rules to play efficiently and differently.
- People discuss the future actions they will take.
- People also talk about themselves, about their lives and relationships.

Methodology

The objectives of the current study were to assess the role of playing PUBG in modifying the speaking skills of youth and determining their perception about in-game chatting provided by this gaming platform. For this purpose, a quantitative research method of a self-reported survey was used as it appeared to be suitable in determining behaviors and attitudes of a targeted population towards any particular phenomenon (Berger, [2016](#); Creswell & Creswell, [2018](#); Williams, [2007](#)). A survey questionnaire was developed based on the literature review of past research. It was based on 15 items, aiming to gauge the speaking skills and their association with online gaming. All the tool items showed good internal consistency (Cronbach's alpha = .78). Through random probability sampling, data were collected from ($N=216$) youth participants enrolled in educational institutions located in the Lahore city of the Punjab province, Pakistan.

The questionnaire was hosted on Google Forms, and data were collected online. The targeted population for this study was young PUBG

players(both male and female), ageing between 15 to 25 years(Youth Policy, [2014](#)). The purposive sampling technique was used because the study focuses on those respondents who play the PUBG. At the beginning of the questionnaire, the respondents were asked to skip the survey if they were not playing PUBG. The questionnaire was sent to the targeted population through emails, WhatsApp groups, and postings on Facebook groups. After repeated follow-ups of the online messages, 255 responses were received, and finally, 216 were used for analysis and interpretation. The low response rate might be due to the Covid-19 pandemic during which academic institutions in Pakistan remained closed, and the targeted population could not be reached in person (Higher Education Commission, [2021](#); World Bank, [2021](#)).

The questionnaire was designed to assess the PUBG playing patterns and their association with the development of their speaking skills. It contained general items like *How frequently do you play PUBG? How much time do you spend playing PUBG? Why do you play PUBG? How often do you use voice chat?* Other items were designed to measure their self-assessment regarding the development of their speaking skills while playing this game. For example, these items included questions like *Do you feel excited while communicating with other players? Do you think in-game chatting is improving your communication skills? Do you think PUBG players imitate other teammates' speaking styles? and how often have you adopted words from other teammates' language?* with options given on the 5 Likert Scale, for example, *1 = Never, 2= Very Rarely, 3= Rarely, 4= Frequently, and 5= Very Frequently.*

Results and Discussion

This study investigated the role of PUBG in reshaping the speaking skills of the youth of Pakistan through an online survey for data collection. The key findings of the study are as follows.

Table 1

Gender of the Participants (N=216)

Variables	Frequency (f)	Percentage (%)
Gender		
Male	153	70.8
Female	63	29.2

Table 1 shows that 153 (70.8%) male and 63 (29.2%) female PUBG players participated in this study.

Table 2

How Frequently Do You Play PUBG? (N=216)

Options	Frequency	Percent	Valid Percent	Cumulative Percent
Daily	148	68.5	68.5	68.5
Twice a week	23	10.6	10.6	79.2
Thrice a week	24	11.1	11.1	90.3
Monthly	1	.5	.5	90.7
Occasionally	20	9.3	9.3	100.0

Table 2 shows most of the participants (68.5%) play the game daily. 9.3% reported that they play it occasionally but their ratio is relatively low.

Table 3

How much time do you spend playing PUBG?

Options	Frequency	Percent	Valid Percent	Cumulative Percent
1-2 hours	101	46.8	46.8	46.8
3-4 hours	63	29.2	29.2	75.9
4-5 hours	31	14.4	14.4	90.3
More than 5 hours	21	9.7	9.7	100.0
Total	216	100.0	100.0	

Table 3 shows that most participants (46.8%) spend one to two hours daily playing PUBG. 29.2 % reported playing the game for about 2-3 hours daily. Only 9.7 % said they play it for more than 5 hours per day. Hence, it may be said that the majority of the participants do not spend a considerable time of their day playing PUBG.

Table 4*Why do you play PUBG?*

Options	Frequency	Percent	Valid Percent	Cumulative Percent
For entertainment	96	44.4	44.4	44.4
To pass time	58	26.9	26.9	71.3
For stress release	23	10.6	10.6	81.9
To connect with family	2	.9	.9	82.9
To communicate with friends	37	17.1	17.1	100.0
Total	216	100.0	100.0	

Table 4 shows that most of the partakers (44.4%) reported playing the game for entertainment. In contrast, only 0.9 % use this gaming platform to connect with their family members.

Table 5*Do you feel excited while communicating with other players?*

Options	Frequency	Percent	Valid Percent	Cumulative Percent
Never	110	50.9	50.9	50.9
Very Rarely	21	9.7	9.7	60.6
Rarely	29	13.4	13.4	74.1
Frequently	32	14.8	14.8	88.9
Very Frequently	24	11.1	11.1	100.0
Total	216	100.0	100.0	

Table 5 shows that 50.9% of the participants did not feel much excited while communicating with other players. Only 11.1% very frequently felt excited to talk with other players.

Table 6

Do you think in-game chatting is improving your communication skills?

Options	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	13	6.0	6.0	6.0
Disagree	13	6.0	6.0	12.0
Neutral	44	20.4	20.4	32.4
Agree	125	57.9	57.9	90.3
Strongly Agree	21	9.7	9.7	100.0
Total	216	100.0	100.0	

Table 6 shows the majority of the respondents (57.9%) agreed that in-game chatting improves *their communication skills*. Whereas, only 6.0% strongly disagreed with the question.

Table 7

Do you think PUBG players imitate other teammates speaking styles?

Options	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	2.8	2.8	2.8
Disagree	43	19.9	19.9	22.7
Neutral	56	25.9	25.9	48.6
Agree	98	45.4	45.4	94.0
Strongly Agree	13	6.0	6.0	100.0
Total	216	100.0	100.0	

Table 7 shows 45.4% of the respondents informed that most PUBG players imitate other teammates' speaking styles. In comparison, only 19.9% disagreed with this notion.

Table 8*Do your parents think that PUBG negatively influences you?*

Options	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	11	5.1	5.1	5.1
Disagree	53	24.5	24.5	29.6
Neutral	37	17.1	17.1	46.8
Agree	15	6.9	6.9	53.7
Strongly Agree	100	46.3	46.3	100.0
Total	216	100.0	100.0	

Table 8 depicts that parents of most of the participants of this study (46.3%) think that playing PUBG negatively influences them. Only 5.1% reported that it was not the case with them.

This study was conducted to assess 'how PUBG plays a role in developing the speaking skills of youth and how the young gamers perceive the effects of interacting with other players on their speaking skills 'Its results establish that PUBG helps the players communicate with each other by e accessing the chat feature. Thus, it helps them socialize with others by speaking or writing. It not only helps them develop friendships s but also reshape their speaking skills through in-game chatting. It is also reported that they adopt the words used by other players, and imitate their speaking style.

Therefore, this study shows that PUBG prompts the players to shape their speaking skills. The game improves the youth's speaking skills. They also imitate their co-players' speaking style and adopt their words including those which are considered rude. When players team up with foreigners, they must converse in English or whatever language they (the foreigners) do speak. Commonly, the players discuss game strategies in English. On average, it takes 20 minutes to play one game, but the duration may fluctuate.

This study also shows that most of the youth have not heard from their family or friends that playing PUBG has changed the way they communicate. However, some of them have been told that this has happened. The perception of youth about reshaping the speaking skills and

voice chat in PUBG is that most of them do not find it exciting to communicate with the co-players because the latter use offensive language during the in-game chatting.

Conclusion

To conclude, PUBG is a platform where youth connect with their friends and relatives, and develop new friendships. By communicating with people from different cultures, one becomes familiar with their culture and language. Online gaming platforms have both positive and negative effects on reshaping the speaking skills of youth. Players learn how to best communicate with others, which allows them to mutually discuss strategies of gameplay. The findings of the study determined that PUBG players and their speaking skills are correlated. The game also allows players to develop new friendships with other players. Generally, individuals play PUBG for entertainment, to release stress, pass their free time, connect with family, or communicate with friends. The player's perception of PUBG is primarily favorable. While playing PUBG, players discuss game strategies, talk about random things, and coordinate and cooperate with co-players. Some players use foul language in PUBG, which negatively impacts their teammates discourse/their conversation. Most parents are not happy with the fact that children spend a significant amount of time playing online games online.

For this reason, this study proposed that online gaming outlets can be used for a variety of productive purposes, including teaching new languages, improving student participation and focus, cultivating social and emotional skills, and inspiring youth to take calculated risks in resolving real-world problems. To ensure maximum participation of students, teachers might help in creating the difficulty level of a game as per their pupils' a capability. Online gaming platforms, such as PUBG, can also prove beneficial for students with special needs since they may help them learn communication skills that are not taught in classes.

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