



# Influence of Popular Online Games on English Language Skills Development of Children in Dhaka City

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**Abstract**— *This research paper aims to examine the influence of popular online games played by children on their development of English language skills. The language English carries a certain international status and different research in the field of language pedagogy attempt to find ways for teaching it easily. Different games can be proved helpful for teaching and learning English in interesting ways. Nowadays children are being highly involved in online gaming where they communicate with co-players from different countries using English. Thus, they get exposed to a constructed reality where lies the possibility of developing English language skills through interaction and active learning. To explore that possibility, this research has been conducted on 8-14 years old gamer children of Dhaka city who are yet to be proficient in English language. The sample children were surveyed and observed along with collection of opinions of some of their guardians. The analysis of these data showed that online gaming has brought noticeable development in the speaking skill of these children when listening and reading were facilitated to a certain extent too without much effort. But it has the least or almost no impact on their writing skill. These findings would add knowledge on the field of language pedagogy and facilitate easy learning.*

**Keywords**— *Active learning, English language, influence, language skills, online games.*

## I. INTRODUCTION

As English is a widely used language for international purposes and higher studies, children are taught English from elementary level. But traditional old-school methods are not efficient enough for children from non-English speaking countries. Most of the time this happens because of the lack of modern resources and teachers not being able produce relevant materials on their own (Hull, 2011).

In this era of technology, children have been engaging in using mobile phone or computers. Online games are one of such entertainment sources in which children are getting involved more and more. Such media exposure is deeply connected to one's cognitive development which we often don't realize (Heather et al., 2008). Therefore, different medias can be tried out to facilitate learning and game-based learning is one of them (Yang & Hsu, 2013). Again, among different sort of

games, mostly online games provide a conversational framework that makes opportunity to interact with other co-players. Thus, it demands the use of a common language as the players advance towards a common goal within the game's setting (Spyridonis et al., 2018).

But many parents are concerned and worried about their children's exposure to gaming and skeptic about the connection between children playing games and learning something from it (Lieberoth & Fiskaali, 2021). Therefore, this research attempts to find the bright side of the unpopular issue of popular online games being the source of gaining linguistic ability.

The COVID time has introduced us with online learning as a crying need in certain situations. Since 17th of March, 2020 the educational institutions have been closed in Bangladesh for a while. During that time, children have been spending time at home and have been exposed to different medias more than ever before. Among

them, 19% of the female students and 23% of the male students spend time playing online games and browsing internet (BRAC, 2020). Therefore, the issue of children being involved in gaming is a prevalent one and this research would try to connect it with the learning process of children.

This research emphasizes on the impacts online games have on the four skills of English language (listening, speaking, reading, and writing) of the children and the possibility of turning online gaming as a helpful tool in English language teaching in the context of Dhaka city of Bangladesh and in case of the children within 8 to 14 years old.

### **Research Objectives**

The general objective of this study is:

- To explore the influence of online games on children's English language skills development.

The specific objectives are:

- To find out the impact of online games on four skills of English language (listening, speaking, reading, and writing) of the children.
- To recommend ways for the institutionalization of online games in English language teaching.

## **II. RELATED WORKS**

### **i) Virtual Communication and Language Learning**

Jie Chi Yang and Hui Fen Hsu's (2013) paper entitled "Effects of online gaming experience on English achievement in an MMORPG learning environment" presented how multiplayer online games could be an effective tool to learn vocabulary and sentence structure. Here, there is a chance to express one's condition, feelings, thoughts with other players while playing. At the same time, such games include role playing that is a great medium of learning through different characters or avatars which allow the gamers to act as an individual within the game. Thus, they suggested a virtual learning environment for students in case of learning English.

As found in a research conducted by Sundqvist and Wikström (2015), it is stated that there is a significant difference between the linguistic benefits generated by MMORPGs when compared to single-player games. These gamers generally acquire more positive linguistic benefits than players of single-player games. Sundqvist and Wikström (2015) believe this can be attributed to the increased level of active participation demanded here.

MMORPGs also offer social interactions. These interactions offer situations wherein the students also acquire linguistic input that would otherwise be more difficult to attain. Online situations have different medium in which the linguistic input is needed. These types of situations offer a different source of motivation and different opportunities for the students to practice the target language.

### **ii) Role Plays and Language Learning**

R. L. da Silva (2014) talked about how video games could be a way to enhance the proficiency of language learner in his article "Video Games as Opportunity for Informal English Language Learning: Theoretical Considerations". He argues that games are a great way of teaching various types of language quirks such as accents. The article describes two particular types of skills that video games help cultivate: receptive skills (reading and listening) and expressive skills (writing and speaking) (Silva, 2014). It happens by giving players new vocabulary and then immediately providing them with the proper context. These games stimulate the player's other senses and have a character perform a corresponding action.

Domas Rudis and Svetozar Poštić (2018) came up with several notions regarding the assistance of video games in the acquisition of English language. They showed the popularity of video games are the most among other medias like books, cartoons as they are interactive and their influence on language learning is positive. They described the process how these games influence language acquisition. The gamers try to understand the situation of the games and follow the instructions to fulfill the objectives of the games. Thus, they both passively and actively engage in English language acquisition.

Lisbeth M Brevik (2016) conducted a research on the secondary school going boys around 16 to 17 years of age on their reading skill of English which was their second language (L2). These boys were poor readers of their native Norwegian language (L1) but good in English language which is something unusual. When she tried to figure out the reason, she found that all of these boys "play online games in English on a daily basis" (Brevik, 2016).

### **iii) Media and Language Learning in the Context of South Asia**

Shaheen Ara (1970) in her paper entitled "Use of Songs, Rhymes and Games in Teaching English to Young Learners in Bangladesh" presented how a stress-free environment could offer much more than the traditional learning environment and to prove this point, she particularly focused on music, rhymes and games. About games, she implied that it can be a very efficient tool for

learning language as it is enjoyable, has “a reason to communicate” and has “a lot of repetition” of language (Ara, 1970).

Lauri Pynnönen (2019) worked on guardians’ attitude towards game-based learning in context of Pakistan and Bangladesh. In this research, he attempted to find out learners’ response and guardian’s attitude towards a game-based learning. The guardians were doubtful about such digital learning but the participation of children in this game-based learning process was spontaneous as the traditional South-Asian ways have been monotonous to a lot of them.

### III. CONCEPTUAL FRAMEWORK

A conceptual framework according to the researchers, refers to a structure that has the ability to present the sequential or natural progression of the matter that is being studied in the best form possible (Camp, 2001).

This conceptual framework below has the sequential process how this research has advanced and where it has proceeded towards.

The conceptual framework shows that typical methods of ELT and children involving in online gaming these days have merged to the inception of the connection of online gaming and language learning.

That idea leads to the examination of the effects of online gaming in the development of English language skills of the children.

Then this surveys and observation lead to the idea of institutionalization of online gaming though it must face both academic challenge and impact of guardian’s outlook on it.

Finally, all these processes may lead to the situation where spontaneous participation of children in learning English language can be witnessed.

### IV. METHODOLOGY

#### i) Research Nature

This research has used a mixed approach including both qualitative and quantitative analysis of data. It has worked with children of Dhaka city who has a trait in common which is playing online games. It has attempted to comprehend the language (English in particular) learning process of these children.

#### ii) Data Source

Both primary and secondary data were used for the sake of this research. Primary data were collected from

the participants and researcher’s observation of gamer children. The secondary sources of this research have been different journal articles by other researchers and scholars.

#### iii) Methods and Tools

This research has used survey and observation as methods to reach to its outcome. The researcher has run a survey on the sample participants and has done observation on few of them. Therefore, this research has used both open-ended and close-ended survey questionnaires and direct observation as data collection tools. Charts and tables have been used for the presentation of data.

#### iv) Sampling

15 gamer children were the participants of the survey questionnaire and 3 guardians filled up the questionnaire prepared for them. 2 gamer children were taken for the sake of observation.

The children who are inhabitants of Dhaka city have been selected as it will help the study to be more accurate and at the same time approachable for the researcher. Children who are in English medium schools have been avoided to preserve the quality of the outcome of this research.

Children who were observed by the researcher were chosen purposely as the researcher personally knows them being a heavy gamer.

### V. RESULTS AND DISCUSSION

#### A) Gamer Children’s’ Survey Report

##### i) Exposure to Multimedia

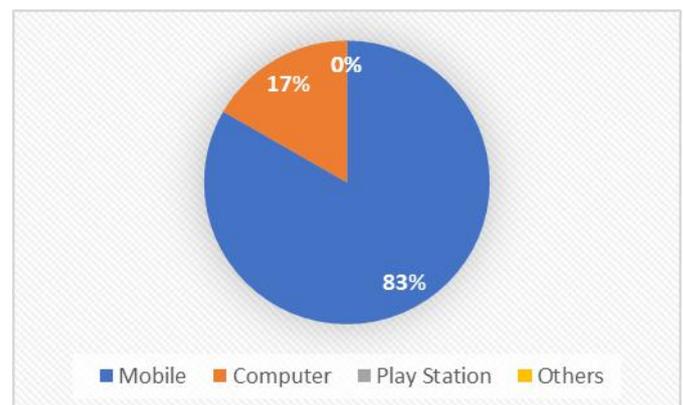


Fig. 2: Exposure to Multimedia

This percentage shows that majority of the children this age is exposed to devices like mobile or computer. It also makes the idea evident that the children of this age are spending quite an amount of time in online gaming regardless of its effects.

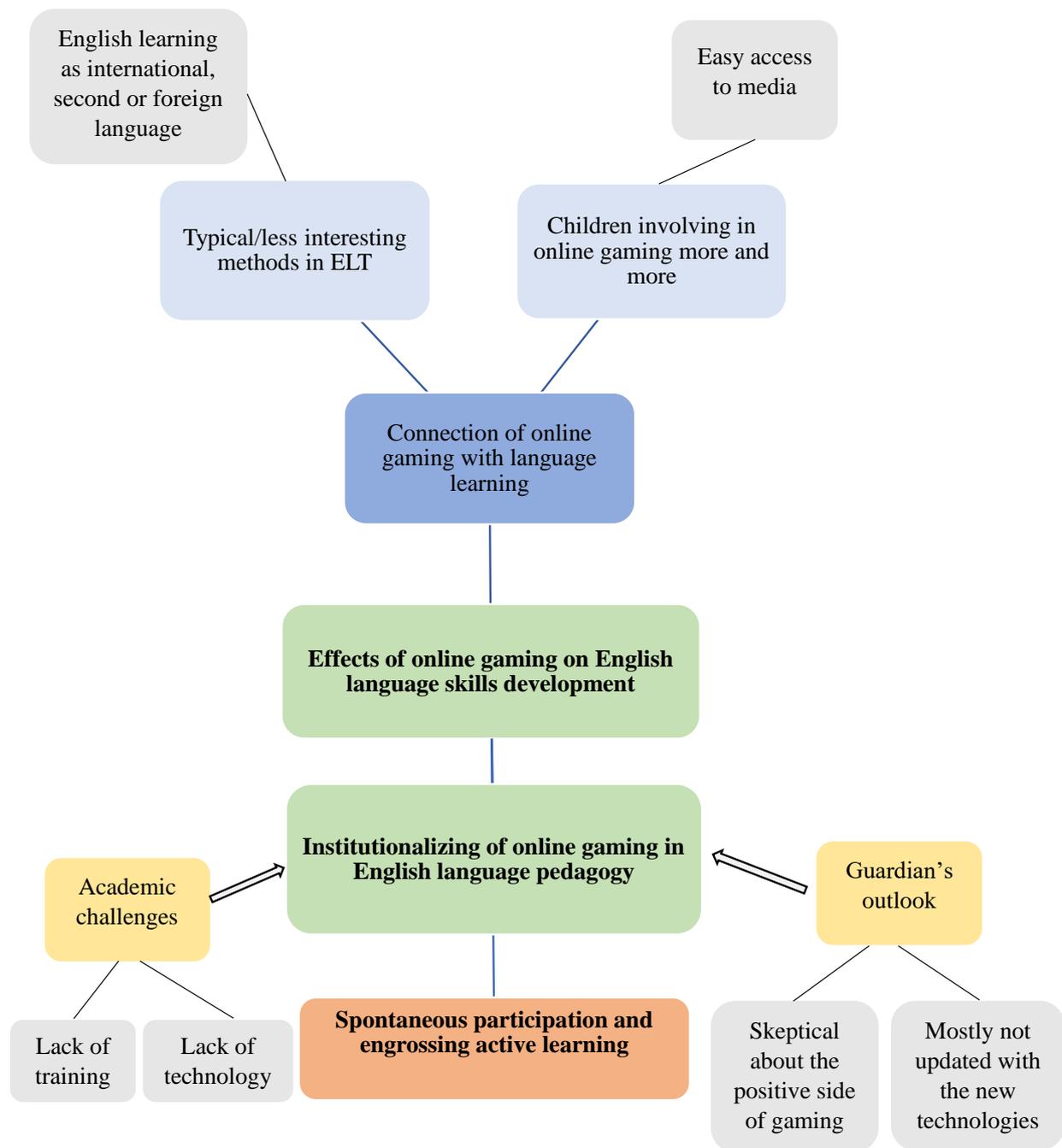


Fig. 1: Conceptual Framework of the Study

**ii) Popular Games among the Children**

The games from children’s responses are ‘Minecraft’, ‘(Garena) Free Fire’, ‘Clash of Clans’, ‘PlayerUnknown’s Battlegrounds (PUBG)’, ‘Call of Duty’, ‘Delta Force’, ‘Asphalt 8: Airborne’, ‘Mini Militia - Doodle Army 2’, ‘Grand Theft Auto: Vice City’, ‘Craftsman: Building Craft’, ‘Plants vs. Zombies’, ‘Ludo’, ‘Granny’, ‘Shadow Fight’, ‘Puzzle’, ‘Snake’, ‘Talking Tom’, ‘Mouse

Trap’, ‘UFO’, ‘Talking ginger’, ‘Dragon Evolution’, ‘Bubbu School’, ‘Dino Coloring Game’.

Most of them are multi-player in nature and others are AI-based solo games.

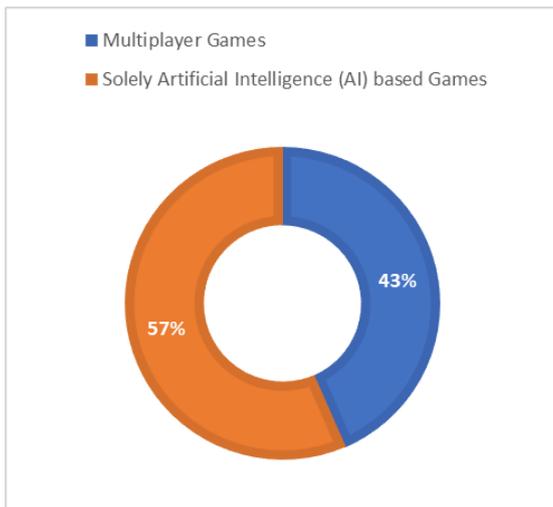


Fig. 3: Nature of Games Children Mostly Play

iii) Assimilation Ability

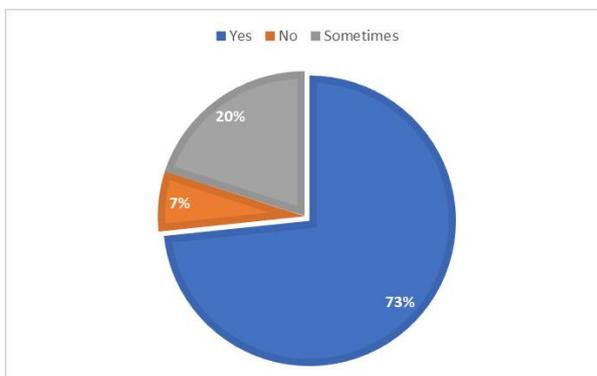


Fig. 4: Assimilation Ability

These analytics show that majority of the children can understand or apprehend information from virtual reality of these online games which is the first step of active learning.

iv) Report on Reading Skill

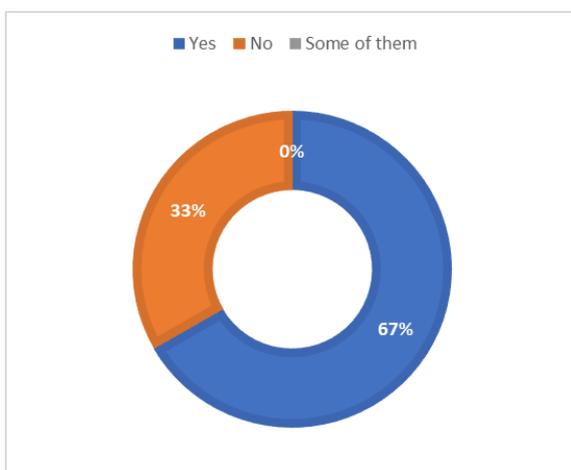


Fig. 5: Report on Reading Skill

The analytics show that majority (67%) of the children said that they can read all the English words in the games they play.

v) Enrichment of Vocabulary

The children were asked to write few English words that they have learned from gaming to assess the influence of gaming in their enrichment of vocabulary. Their responses are as follows.

Table 1: Vocabularies Learned from Gaming

Newly Learned Vocabulary	Parts of Speech
Action	Noun
Armory	Noun
Bite	Verb
Bridge	Noun, Verb
Buck	Noun, Verb
Catch	Verb
Collection	Noun
Dino	Noun
Dynamic	Adjective
Fight	Noun, Verb
Fire	Noun
Jump	Verb
Kill	Verb
Match	Noun, Verb
Plant	Noun, Verb
Redeem	Verb
Search	Verb
Shoot	Verb
Stone	Noun
Trap	Noun, Verb
Tyrannosaurus	Noun
Vault	Noun
Weld	Verb
World	Noun

Most of these newly learned words are quite complex for children to learn easily and most of the words are either verb or action words and nouns.

vi) Development of Speaking Skill

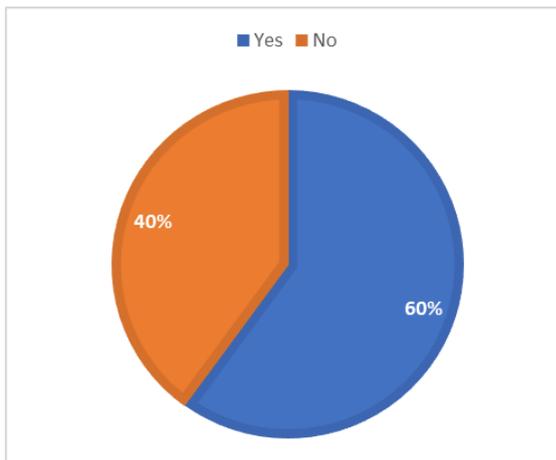


Fig. 6: Development of Speaking English

The above chart shows that majority (60%) of the children said that they use the new vocabulary learned from online gaming while speaking. This can be a new perspective on vocabulary learning from online gaming and utilizing it to enhance the children’s speaking skill which is normally a long-term process.

**vii) Development of Writing Skill**

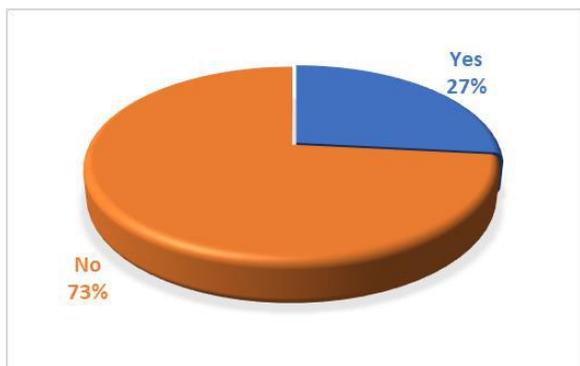


Fig. 7: Development of Writing Skill

Here, 73% of the children said that they don’t use the vocabulary they learned from online gaming in their writing and that’s because of not remembering the proper spelling of the words.

**viii) Engagement in Online Gaming**

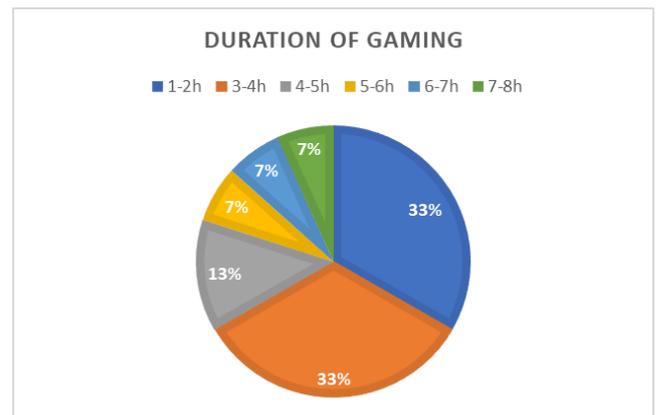


Fig. 8: Engagement in Online Gaming

The children were asked to write an estimated time of their gaming activities. This calculation will help to understand the probable participation of these children in study sessions if it includes online gaming. Their responses are summarized in the above chart.

**ix) Disturbance in Studies**

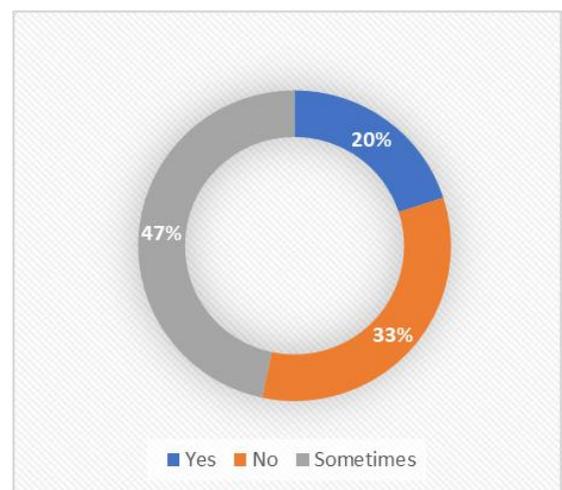


Fig. 9: Disturbance in Studies

It is evident from the analytics that even the gamer children admit that there is some negative impact of gaming and it comes in the way of studying.

**x) Allowance from Guardians**

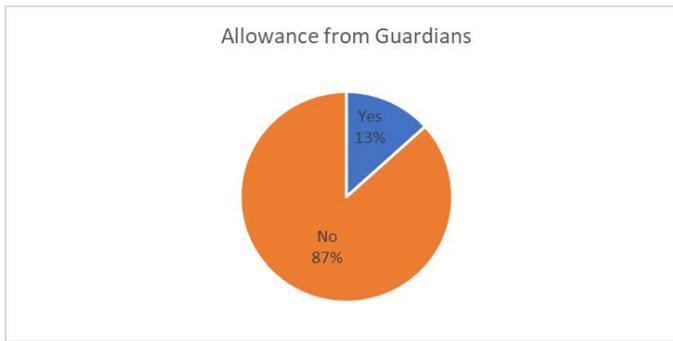


Fig. 10: Allowance from Guardians

The above chart depicts the allowance from guardians that children get for playing online games and it has an overwhelming result to portray. The outlook of the guardians here is mostly negative in case of letting the children play online games.

**xi) Opinion on Gaming Being Helpful to Learn English**



Fig. 11: Opinion on Gaming Being Helpful to Learn English

60% of the children put their opinion in favor of gaming as a helpful tool for them to learn English.

**B) Guardians' Survey Report**

**i) Perspective on Online Gaming**

The result in this case is a bit unexpected as all the guardians who participated in the survey agreed that it is necessary to let their child play online games at least “sometimes” with no one choosing the option “Never”.

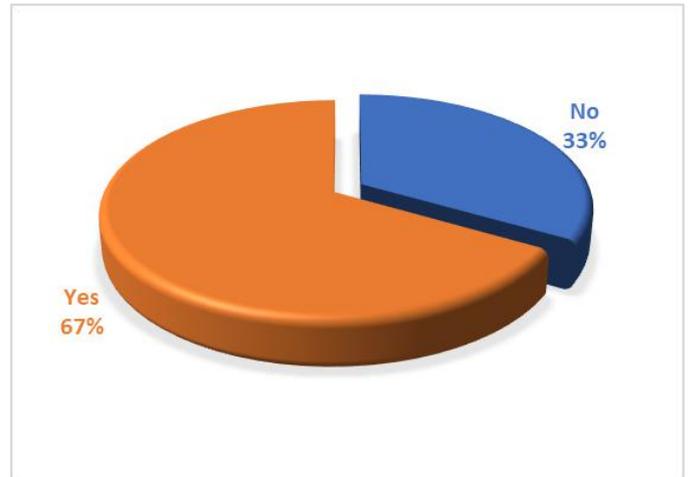


Fig. 12: Perspective on Online Gaming

**ii) Clash with Studies**

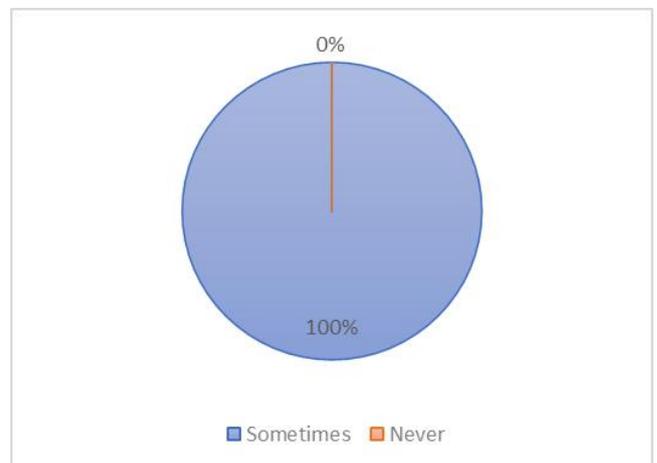


Fig. 13: Clash with Studies

A minority (33%) of the guardian think that it is okay to play these games as they do not see it clashing with studies and the rest thinks that online gaming is negatively affecting their child’s studies.

**iii) Report on Assimilation Ability**

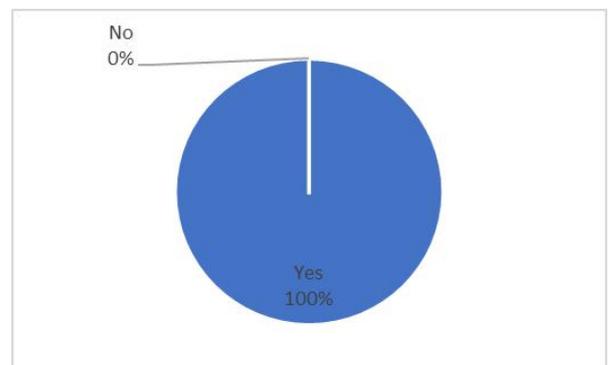


Fig. 14: Report on Assimilation Ability

Surprisingly, all the guardian (participant) claimed that their children’s understanding regarding English language is better than what was before online gaming with no one claiming otherwise.

**iv) Report on Speaking and Writing Skill**

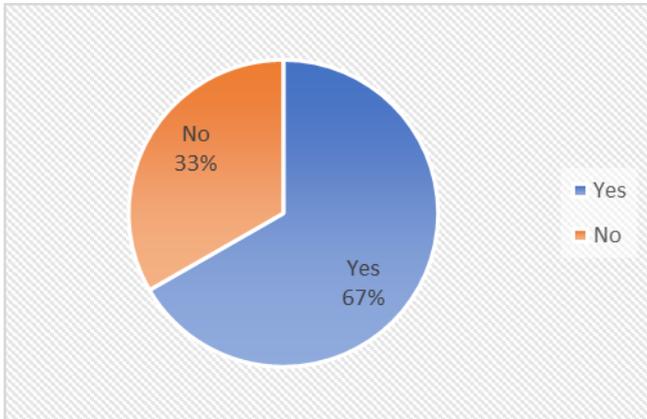


Fig. 15: Report on Speaking and Writing Skill

67% of the guardians said that their children’s overall speaking and writing have more English words in them now. But the rest said not to have found such noticeable changes.

**v) Thoughts on the Inclusion of Online Gaming in English Language Pedagogy**

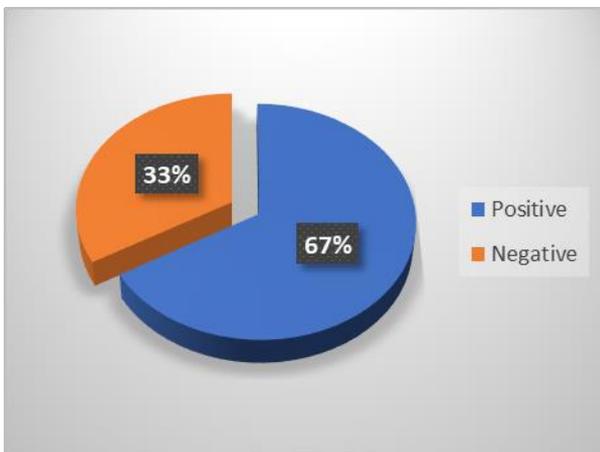


Fig. 16: Thoughts on the Inclusion of Online Gaming in English Language Pedagogy/

Here, the guardians are divided too as 67% of them think that it is a good idea when the rest (33%) of them think that institutionalization of online gaming is probably more harmful.

**C) Observation Report on Children**

The notes taken by the researcher during the observation of the gamer children have been presented in

this part. Two children have been observed and they will be mentioned here as Child 1 and Child 2.

**i) Difference in Attention or Focus**

It has been observed in case of child 1 that he doesn’t have as much attention towards his surroundings as he had while gaming where child 2 was continuously communicating with other players (he mostly plays multiplayer games) throughout most of the session ignoring people around him.

**ii) Difference in Engagement**

Child 1 was trying his best to understand the tasks and instructions of the game trying out different options of it when child 2 was doing the same to understand everything asked to do in the game.

**iii) Understanding of the Mechanism of the Games**

It is seen that, child 1 was constantly trying to receive different information provided in the game and responded accordingly when Child 2 was seen to break down different instructions within the game as if it was any math problem.

**iv) English Words or Sentences Spoken while Gaming**

Child 1 was seen uttering different English words which are mostly names of objects. Again, he was seen saying “Yes!” in ecstasy when he could win or succeed in the game and “Shit!” when he failed. Child 2 was seen saying different action words like “run”, “shoot” while playing with other co-players. Again, he too said “Oh, no!” in frustration when he lost a round or failed a certain task.

**v) Post Gaming Effects**

The differences that have been recorded after a gaming session of the children by conducting a close observation on them are listed down below.

- a) Frequent use of English words was found as they were conversing with the researcher.
- b) They were brainstorming so that they can find ways to solve the next task or level.
- c) They could understand the words or phrases, or fragments of instruction present on the games when they were repeated by the researcher.
- d) They were searching or asking for new words or terms they found on those games.
- e) Their way of communication noticeably changed in case of conversation on the topic of gaming and what they got to do in that setting.

**D) Discussion**

**i) Development of Listening Skill**

Majority of the children claimed that they could follow up the instructions and directions provided the by the

system of the game or other co-players. Some of the children do recognize words in different context they have heard while gaming. Both the children and the guardians have agreed on this point that online gaming is leaving major impact on their listening skill. Because gamers must listen to their teammates attentively for certain instructions or keeping updated to move ahead in the game (Toufik & Hanane, 2021). Therefore, the effect of online gaming on the development of children's listening skill has been found positive and the depth of it is noticeable.

#### ii) Development of Speaking Skill

The most noticeable changes were witnessed in the speaking skill of the gamer children. Majority of them claimed that they use new English words that they have heard or seen while gaming. It is undeniable by the guardians too as they have all said that their children now do use more English words or sometimes fragment of sentences or phrases when they speak. This is assisted by mostly communication with the other players in multiplayer games as one of the children claimed and by repeating sounds (phoneme) they might have heard while gaming. Again, a gaming setup is facilitating for speaking in a sense that it provides the comfort removing the stress and shyness of the children when speaking (Dewi et al., 2017).

#### iii) Development of Reading Skill

Most of the children said that they have learned a lot of vocabularies by playing these games and now whenever they hit similar words, they can easily read that. Sometimes, even in games these words or phrases are repeated and through these repetitions they are being better readers. The option to replay games works as reinforcement here (Kieran & Anderson, 2016). Here rote learning takes place as repetition causes memorization and recognition of new elements. According to the guardians, their children now understand discourses on English language better than before. But the effect of online gaming on the development of the reading skill of children is not as much as it has been on listening and speaking skill.

#### iv) Development of Writing Skill

This is the skill that is the least affected by online gaming. Majority of the children said that they do not really use new words or any phrases that they have learned from gaming. Guardians are here divided too. Some of them haven't found any noticeable changes in their writing skill as they have found in their listening and speaking skill. The main reason here is spelling as it is a must before writing anything and it is not easy to remember just by hearing or looking once. Therefore, the writing skill of children is not much affected by online gaming. However, they can be asked to write about their favorite games and whatever they like about it to enhance their writing skill (Putri, 2015).

### V) Inclusion of Online Gaming in English Language Teaching

From all the above data and analysis of different opinions and scenarios, this study is positive that it is possible to include online gaming as tool to teach English in an academic environment. All the children thought that it would be a better situation for them to learn English if they could do it in form of playing these games. There is a slight chance of their opinion being biased and therefore the guardian's opinions are much needed for cross-checking. Majority of the guardians thought that it would be a nice opportunity for the children as they get to have entertainment and lessons side by side as one said. From the personal observation of the gamer children by researcher has shown that the engagement and attention that children offer in gaming is what desired but is missing in their academic activities. They even self-learn things when they play such games as these offer an authentic and engaging learning environment (Otting & Zwaal, 2007). Therefore, all these analyses show that the idea of institutionalizing online gaming as a tool to teach English is an insightful and prevalent one.

#### vi) Addressing the Research Questions

This research had the objectives of finding out the influence of popular online games on the development of the English language skills of the children and to examine if it can be included as a tool to teach English. From the analysis of all data received from the participants and discussion on them, it is seen that the speaking skill is mostly affected by online gaming in a positive way. Both listening and reading skill too are being affected to some point effortlessly. But there is no significant impact found in the writing skill of these children. About the idea of institutionalizing online gaming in English language pedagogy, most of the children and guardians are hopeful and welcoming. But considering the other opinions, there must be some measures taken before the actualization of this idea.

## VI. CONCLUSION AND FUTURE SCOPE

### i) Findings

The different findings of this research have been listed below.

- a) Majority of the children have access to multimedia devices like mobile or computer nowadays.
- b) In case of children, online games have taken over other medias for them.
- c) Even though English is not the first language (L1) of the children in Bangladesh, majority of them are

able to understand instructions in this language within these online games.

- d) A good number of children can read different English words or phrases or short sentences that are provided in such games which they are not familiar with.
- e) Children reportedly learned a lot of new vocabulary from online gaming; some of which are tough to learn in normal circumstances at their age.
- f) Some of the children use the newly learned words or phrases or parts of a sentence when they speak which enhances their speaking skill.
- g) There is no significant change in the writing skill of children as they said they cannot mostly use new words or phrases in writing.
- h) Children spend three to four hours in online gaming in average in a day which is quite an engagement.
- i) Few of the children and some of the guardians think that online gaming hampers their studies and some guardians most often don't let them play.
- j) Majority of the guardians think that online gaming of the children is okay if it is regulated.
- k) Both children and guardians agreed that they have witnessed betterment in the overall understanding of English language after being involved in online gaming.
- l) All the children claimed that online gaming can be helpful for them to learn English.
- m) Minority of the guardians were skeptic of the positivity of the institutionalization of online gaming for English language pedagogy when majority thought it could be an opportunity to both learn English and technology at the same time.

## ii) Recommendations

The recommendation suggested the by researcher are as follows.

- a) Utilizing different medias in language teaching should be considered.
- b) As children engage most with online gaming, it should be considered to be a part of English language teaching.
- c) Basic level games should be brought in the language learning environment in case of the lack of high technology in classroom.
- d) Violent games should be omitted and to do that, a review board should be formed.
- e) Online games that have room for communication and interaction should be selected that would encourage active participation.

- f) Teachers should be given primary level training if needed to keep up with new teaching methods and handle the children accordingly.
- g) As reading and writing skills aren't much influenced by online gaming, children should be given tasks on these two skills too after a productive session of gaming.
- h) Future studies can be conducted on the idea of making game-based learning a stand-alone method in ELT.
- i) Finally, children's interest areas should be kept in mind for spontaneous participation and engrossing learning.

## iii) Conclusion

The new generation of children are exposed to different medias unlike previous time and thus the typical methods in which they learn things at educational institutions have become tedious. In this situation, it is wise to take the best of different medias like online gaming.

From the research, it has been proved that children spend a long portion of their time after online gaming every day. It would be great if it could be used in a productive manner as it is a concern of their guardians.

In that case, if online gaming can be used as a tool to teach English in the educational environment in the recommended manner, it would be a both way benefit for the children as their English language skills will be developed and gaming sessions will be regulated.

## iv) Implication

The findings of this research have met the objectives of it and answered to its attempted questions. The idea that children are unconsciously and effortlessly developing their English language skills; especially listening and speaking and learning even tough words easily can be a breakthrough in the field of language pedagogy if implemented in the proper manner.

Future studies can be conducted on the inspection if game-based learning can be a standalone method in ELT and finding ways to reduce the complication of including it in academic environment.

## REFERENCES

- [1] Ara, S. (1970). Use of Songs, Rhymes and Games in Teaching English to Young Learners in Bangladesh. *Dhaka University Journal of Linguistics*, 2(3), 161–172. <https://doi.org/10.3329/dujl.v2i3.4150>
- [2] BRAC. (2020). Impact of COVID-19 on Education in Bangladesh.

- [3] Brevik, L. M. (2016). The Gaming Outliers: Does Out-of-School Gaming Improve Boys' Reading Skills in English as a Second Language? *Sense Publishers*, 39–61.
- [4] Camp, W. G. (2001). Formulating and Evaluating Theoretical Frameworks for Career and Technical Education Research. *Journal of Vocational Education Research*, 26(1), 4–25. <https://doi.org/10.5328/jver26.1.4>
- [5] Dewi, R. S., Kultsum, U., & Armadi, A. (2017). Using Communicative Games in Improving Students' Speaking Skills. *English Language Teaching*, 10(1), 63–71. <https://doi.org/10.5539/elt.v10n1p63>
- [6] Heather, L. K., Ellen, A. W., & Daniel, R. A. (2008). Media and Young Children's Learning. *The Future of Children*, 18(1), 39–61. <https://doi.org/10.1353/foc.0.0002>
- [7] Hull, J.C. (2011). Teaching Speaking and Listening with Scarce Resources. *In English Language Teaching Practice in Asia*. <http://dx.doi.org/10.5746/LEiA/ELTPA>
- [8] Kieran, L., & Anderson, C. (2016). Gaming to Increase Reading Skills: A Case Study. *Examining the Evolution of Gaming and Its Impact on Social, Cultural, and Political Perspectives*, 258–271. <https://doi.org/10.4018/978-1-5225-0261-6.ch012>
- [9] Lieberoth, A., & Fiskaali, A. (2021). Can Worried Parents Predict Effects of Video Games on Their Children? A Case-Control Study of Cognitive Abilities, Addiction Indicators and Wellbeing. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.586699>
- [10] Otting, H., & Zwaal, W. (2007). THE IDENTIFICATION OF CONSTRUCTIVIST PEDAGOGY IN DIFFERENT LEARNING ENVIRONMENTS. *The Challenges of Educating People to Lead in a Challenging World*, 171–196. [https://doi.org/10.1007/978-1-4020-5612-3\\_9](https://doi.org/10.1007/978-1-4020-5612-3_9)
- [11] Putri, Y.K. (2015). Using Video Games to Improve Students' Writing Ability. *In the proceeding of the conference on Teaching and Assessing L2 Learners in the 21st Century, Indonesia*, 99-106.
- [12] Pynnönen, L. (2019). Digital game-based learning for early childhood: Guardians' attitudes in Pakistan and Bangladesh. In L. Elbaek, G. Majgaard, A. Valente, & S. Khalid (Eds.), *ECGBL19: Proceedings of the 13th European Conference on Game Based Learning* (pp. 917-924). (Proceedings of the ... European conference on games-based learning). ACPIL. <https://doi.org/10.34190/GBL.19.163>
- [13] Rudis, D., & Poštić, S. (2018). INFLUENCE OF VIDEO GAMES ON THE ACQUISITION OF THE ENGLISH LANGUAGE. *Verbum*, 8, 112–128. <https://doi.org/10.15388/verb.2017.8.11354>
- [14] Silva, R.L. (2014). Video Games as Opportunity for Informal English Language Learning: Theoretical Considerations. *The ESPecialist*, 35(2), 155-169.
- [15] Spyridonis, F., Daylamani-Zad, D. and O'Brien, M.P. (2018) Efficient In-Game Communication in Collaborative Online Multiplayer Games. *Proceedings of the 10th International Conference on Virtual Worlds and Games for Serious Application (VS-Games)*, Würzburg, 5-7 September 2018, 1-4. <https://doi.org/10.1109/VS-Games.2018.8493420>
- [16] Sundqvist, P., & Wikström, P. (2015). Out-of-school digital gameplay and in-school L2 English vocabulary outcomes. *System*, 51, 65–76. <https://doi.org/10.1016/j.system.2015.04.001>
- [17] Toufik, G. M., & Hanane, S. (2021). Investigating the Potential of Online Video Games in Enhancing EFL Learners' Communication Skills. *Universal Journal of Educational Research*, 9(2), 292–298. <https://doi.org/10.13189/ujer.2021.090205>
- [18] Yang, J. C., and Hsu, H. F. (2013). Effects of online gaming experience on English achievement in an MMORPG learning environment. *Proceedings of the WorldCALL 2013 Conference, Glasgow*, 379–381.