

Perception of Teachers Regarding the Relationship of Modern Video Games on Life Skills of Primary Level Students in the Private Schools of Karachi

Sana Bilwani*
Naina Hassan Ali*

Abstract

The integration of video games into education boosts the engagement of the students, motivation, and learning levels. The aim of the research is to analyse the perception of teachers regarding the relationship between modern video games and life skills of primary level students in private sector of Pakistan. This study is an endeavour to enrich the literature on the influence of modern video games on primary children's education in the private sector of Pakistan. This study sheds light on how challenges in video games directly impact the learning of the students. This research flourishes a comprehensive understanding of the role of video games in improving the academic performance of students belonging to primary classes. A quantitative research design is deemed to be appropriate for this study as there are two variables involved that need to be analysed. To this end, a survey has been carried out with 67 teachers belonging to different schools in Karachi. The outcomes of the research indicated that video games help children in enhancing their problem-solving skills as well as creativity. The findings of the research revealed that video games play an important role in enhancing the technical skills of the student. In addition, the outcomes affirmed that video games play an important role in the education of the children.

Keywords: Abduction, Criminality, Opportunities, Organized Crime, Security, and Violence

Article history:

Received on: March 23, 2022

Revised on: June 25, 2022

Accepted on: June 27, 2022

Published on: June 30, 2022

* Research Scholar, Hamdard University – Karachi. Email: sanabilwani@gmail.com

** Lecturer, Hamdard University – Karachi. Email: naina.hassan123@gmail.com

INTRODUCTION

In recent times, the explosion of contemporary technologies has revolutionized the lifestyles of citizens across the globe. There has been a momentous shift in human activities towards the virtual environment. This shift has replaced the culture of outdoor physical games with virtual games specifically among children.¹ “In the current era, videogames are wizards of engagement and hence, capture a significant proportion of the time of youth. In other words, majority of the teenagers nowadays spent most of their time in playing video games and this has developed into a scholarly debate.”² Various researchers have noted that the specific recurrent exposure of children to technology in the contemporary era could be used to develop valuable learning skills. Even though learning can take place without games, the engagement of the children in video games can accelerate the process of learning.

Researchers including Atma et al., have emphasized on notion that video games can have a significant impact on the education of the children as it can stimulate problem solving, adequate behaviours, social interactions, critical ability, higher-order thinking, memory as well as eye-hand coordination skills.³ Moreover, students who play video games in their leisure time take responsibility for their learning style as well as become independent in their actions and decisions. In spite of the rising acceptance of video games, a large number of researches have focused on the learning environments within educational settings.⁴ Nevertheless, limited studies have concentrated on the positive impact of video games on children concerning education. Furthermore, within the literature video games are considered as the source of entertainment and fun only.

The supporters contend that video games diminish the time of learning, the workload of the teachers and at the same time establish the problem-solving skills among the students. In addition, video games are also deemed beneficial for learning certain languages as well as subjects that are difficult to comprehend in textual form. Video games that are interactive in nature are successful in building information literacy, computer literacy as well as social skills.

According to Hassan the integration of video games into education boosts the engagement of the students, motivation, and learning levels.⁵ Due to the advancement in the technology sector in recent time, the virtual gaming industry in Pakistan has witnessed significant growth.⁶ Nevertheless, video-game literacy is relatively a new phenomenon that is not much explored in the

¹ D. Rudis & Postić, S., Influence of video games on the acquisition of the English language. *Verbum*, 8, 2017, 112-128.

² A.M.Atma, Azmi, M. N., & Hassan, I., The Influence of Modern Video Games on Children’s Second Language Acquisition. *International Journal of Scientific and Technology Research*, 9(8), 2020, 319-323. (320)

³ A.Sánchez-Mena, Martí-Parreño, J., & Aldás-Manzano, J., The Effect of Age on Teachers' Intention to Use Educational Video Games: A TAM Approach. *Electronic Journal of e -Learning*, 15(4), 2017, 355-366.

⁴ R.Casan-Pitarch, An approach to digital game-based learning: Video-games principles and applications in foreign language learning. *Journal of Language Teaching and Research (Online)*, 9(6), 2018, 1147-1159.

⁵ I.Hassan, The Influence of Modern Video Games on Children’s Second Language Acquisition. 2020, Available at SSRN 3680020.

⁶ Op.Cit., Rudis, D., & Postić, 112-128.

researches conducted in Pakistan. Therefore, there is a strong need to analyze the influence of video games on the primary education of children in Pakistan. This research study is an attempt to bridge the existing gap and aim to explore the aspects of learning via video games in private education sector of Pakistan.

Aims and Objectives of the Study

The aim of the research is to analyse the perception of teachers regarding the relationship between modern video games and life skills of primary level students in private sector of Pakistan. The objectives of the research are as follow:

- To scrutinise the current extent of usage of video games in the primary education sector in Pakistan
- To determine the impact of video games on the life skills of the students
- To identify the barriers that impede the integration of video games into the education of the students

Research Questions

- What is the role of the modern video games in improving the life skills of primary level students in the private sector of Pakistan?
- What are the barriers that impede the integration of video games into the education of the students?

Research Hypothesis

Major Hypothesis

- H₁: There is a significant impact of video games on the improvement of life skills of the children
- H₀: There is no significant impact of video games on the improvement of life skills of the children

Sub Hypothesis

Variable: Gender

- H₁: There is significant difference between perceptions of male and female teachers about the effect of video games on the life skills of children.
- H₀: There is no significant difference between perceptions of male and female teachers about the effect of video games on the life skills of children.

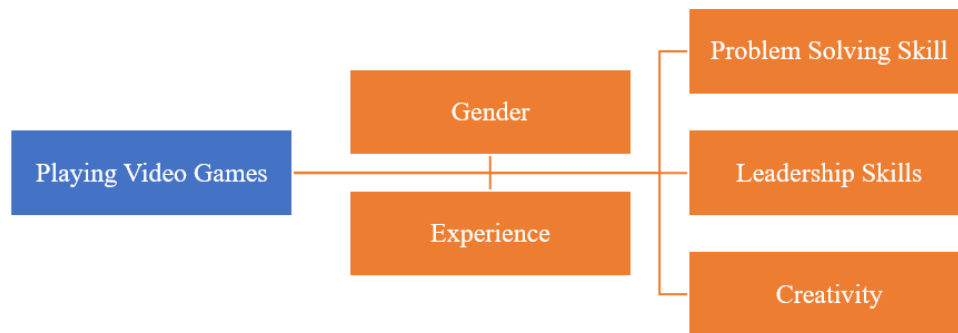
Variable: Experience

- H₁: There is significant difference among perceptions of varied experienced teachers about the impact of video games on the life skills of the children.
- H₀: There is no significant difference among perceptions of varied experienced teachers about the impact of video games on the life skills of the children.

Significance of the Research

In view of the fact that a large number of children play video games in their leisure time on a daily basis, the primary education sector ought to integrate video games for enhancing the learning of the students. Nevertheless, the fusion of video games or the implementation of gamification into education is comparatively a new concept and requires significant research. This study is an endeavour to enrich the literature on the influence of modern video games on primary children's education in the private sector of Pakistan. This study sheds light on how challenges in video games directly impact the learning of the students. The studies in the past with the same focus have been performed in developed nations by Horowitz in 2019 and Papastergiou in 2009.⁷ These researches conclude that video games have a positive impact on the education of children. In developing countries such as Pakistan, this area is not much developed. Therefore, this research flourishes a comprehensive understanding of the role of video games in improving the academic performance of students belonging to primary classes. It further sheds light on the barriers that restrict the utilization of video games in the education sector of the country.

Conceptual Framework



Theoretical Framework

In the review of the literature of this work, it is explored how video games can influence education. Some studies such as Rudis & Postic., (2017) are in favor of the fact that spending more time on video games decreases the use of time in other types of cultural activities such as reading or

⁷ K.S. Horowitz, Video Games and English as a Second Language: The Effect of Massive Multiplayer Online Video Games on the Willingness to Communicate and Communicative Anxiety of College Students in Puerto Rico. *American journal of play*, 11(3), 2019, 379-410. And M.Papastergiou, Exploring the potential of computer and video games for health and physical education: A literature review. *Computers & Education*, 53(3), 2009, 603-622.

watching movies. Others blame video games for the possible sporadic aggressive actions of some people who often make use of this entertainment. And finally, there are those who claim that, due to the realism of video games, the wall between what is fiction and reality is so thin that many times children do not know how to distinguish where they are.⁸ In addition, there may be indications that one of the causes of bullying in school classrooms may be due to the use of violence and scenes where the losing subjects are seen in some games of recognized fame such as the well-known *Mortal Kombat*.⁹

Now, these somewhat negative ideas have evolved, since it has been discovered that video games have components that allow the cognitive development of individuals when using learning theories.

Learning Theory

The key emphasis of learning theory is that "the human capacity to use symbols allows to represent phenomena, analyse their conscious experience, plan, imagine and act in a forward-looking manner". The relationship presents with video games is that, in some cases, as, for example, in the *Uncharted* saga, developed by Naughty Dog in 2007, this ability must be used to solve different puzzles that allow progress in the game, that is, interaction is promoted by the player subject. Even Atma et al., defends that the user public acquires five significant learnings such as motor skills, understanding and assimilation of verbal information, intellectual skills, attitudes such as moral ethics and cognitive strategies since they enhance attention and concentration. The same author indicates that it helps to promote values among children such as respect for authority, equity, justice due to the rules and collaboration, and the duty to help due to its social component.¹⁰

Casan-Pitarch , gives another vision of video games, associating each type of game with different skills that are learned. Furthermore, he attributes to them the improvement of spatial orientation and psychomotor development.¹¹ Apart from the use of theories to explain the benefits of video games, they present potentially beneficial aspects for youth in their development. Among them, the cognitive aspects, skills and abilities, socializing aspects, and digital literacy can be highlighted.¹²

Video games can be used as a tool to enhance childhood narrative skills or to change their mood. Hassan shows that playing puzzle video games helps to change the state of mind, causing some relaxation.¹³ Horowitz identifies a quite beneficial factor by video games for people in need of special education, since they can be adapted to their difficulties and allow a greater understanding

⁸ A.Al-jifri, The impact of video games in the acquisition of English language: The case of Saudi youths. *Journal of Foreign Language Education and Technology*, 2(2), 2017, 15-35.

⁹ E. Boon, & Tobias, J., *Mortal Kombat*. *Encyclopedia of Video Games: The Culture, Technology, and Art of Gaming*, 1, 2012, 420.

¹⁰ Op.Cit., Atma et al., 319-323.

¹¹ Op.Cit., Casan-Pitarch , 1147-1159.

¹² Y.B.Kafai, Heeter, C., & Denner, J. (Eds.), *Beyond Barbie and Mortal Kombat: New perspectives on gender and gaming*, 2008, Mit Press.

¹³ Op.Cit., Hassan., 15

of what is taught.¹⁴ There are authors who affirm the existence of certain games that can help with issues related to the acquisition of healthy habits.

Other approaches to video games as an educational factor are the following:

Immersive learning. Playing allows children to be exposed to a combination of experiences and decision-making, which allows the individual to learn based on the union of these characteristics.

The development of soft skills. Traditionally, education focused primarily on the acquisition of content. Currently, the paradigm of education has evolved to teaching-learning by competencies. Through the use of video games one can develop different types of skills such as problem-solving and overcoming challenges.

Complex learning. Video games have the ability to attract the attention of children and enhance their curiosity while they are learning.

Classification of Video Games

A video game is an electronic game in which one or more people interact. Its interface is through a screen, hence its name, "video game", which has evolved thanks to the advancement of technologies, reaching greater complexity and robustness. It can be implemented on one or more platforms, such as a computer, a console, a portable device (a mobile phone, a tablet), an arcade (video game machines adapted for public places), etc. The research by Rudis & Postic., concludes that there is no evidence to confirm the negative effects of video games, nor to affirm that they produce aberrations in children's behavior. It seems that the only really proven risk of their regular employment is that it prevents dedication to other social activities.¹⁵

Video games, like movies, have a classification for their audience, which is defined by age - assuming a supposed average maturity that is obtained as a person grows, since the contents differ - as well as their complexity, for which the classification made by Papastergiou,¹⁶ (2009) is as follow:

- *Action games.* They propose activities to cause a precise, determined and quick response to the player. They are games in which you do not have to plan any action, but rather interact in the environment as quickly as possible through simple actions such as shooting or hitting (quick decision making).¹⁷
- *Simulation games.* Simulation has been one of the important challenges for video game developers and, in itself, it is a type of game, but it also establishes itself as a transversal component to the rest of the genres. They make it possible to experiment and investigate the operation of machines, phenomena, and situations and to assume command (not only

¹⁴ Op.Cit.,Horowitz, 379-410.

¹⁵ Op.Cit.,Rudis & Postic., 112-128.

¹⁶ Op.Cit.,Papastergiou, 603-622.

¹⁷ M.Barr, Video games can develop graduate skills in higher education students: A randomized trial. *Computers & Education*, 113, 2017, 86-97.

to operate an airplane, for example, but to simulate a flight). They require complex strategies. They require and provide specific knowledge.¹⁸

- *Role-playing games.* They are similar to adventure games, but instead of being based on solving puzzles, they depend on the evolution of the characters. Their success is supported by an outstanding technical power never seen before, which allows them to be completely immersed in the game. Role-playing games develop mental calculation, vocabulary and stimulate creativity, in addition to certain attitudes or socialization values such as empathy, tolerance, awareness, and responsibility, together with teamwork.

Impact of Video Games on Education

The study of the impact of video games is a subject of special interest, not only from the perspective of consumers, production companies, and public administrations but also because videogames are a socializing agent that has a great influence on the cultural values that our children and adolescents acquire. It is essential to highlight that video games influence that part of the population that consumes them, for this reason, studies are being carried out on the cognitive implications that video games entail and how they influence education.¹⁹

On one hand, there are the supporters who offer a more positive view, referring to the arguments of those video games where a simulation of reality is presented. This allows children to discover, in a less abstract way, new elements that will help them to form in their learning process. However, the most remarkable thing is that adolescents discover them with cognitive efforts that they already know or are familiar with. Another advantage that video games provide is that they allow learning through the experience of online worlds and interaction with virtual entities based on complex algorithms.²⁰

On the other hand, there are those subjects who see more learning limitations over those who play video games and even those who consider them a negative impact. Along these lines, the most negative point of video game consumption is that they have both implicit and explicit violence, which generates aggressiveness in those who play them, both during game sessions and later. The constant review of the benefits that video games bring offers the possibility of creating new technologies more oriented to other areas than the leisure sector. Kenwright demonstrates a clear contribution of virtual reality to sectors such as medicine through simulators based on video game.²¹

In developed nations, video games are used as a learning tool, even in early childhood education. The research by Castro et al., encourages the use of video games in the classroom so that children can develop social awareness, and highlight civic and moral values that they face in their daily lives, such as respect for adults, the environment, obeying parents, among others. Instinctively, the

¹⁸M.Barr, Student attitudes to games-based skills development: Learning from video games in higher education. *Computers in human behavior*, 80, 2018, 283-294.

¹⁹ Op.Cit.,Barr., Video games can develop graduate skills in higher education students: A randomized trial, 86-97.

²⁰Núñez-Barriopedro, Estela, Sanz-Gómez, Yeray, & Ravina-Ripoll, Rafael. Videogames in Education: Benefits and Harms. *Revista Electrónica Educare*, 24(2), 2020, 240-257. Epub May 01, 2020.<https://dx.doi.org/10.15359/ree.24-2.12>

²¹ B.Kenwright, A brief review of video games in learning & education how far we have come. In *SIGGRAPH Asia 2017 Symposium on Education*, 1-10

human being learns by playing. From the first years of life, the child acquires knowledge through play.²² In the viewpoint of Horowitz., this characteristic allows the infant to socialize in a completely new environment, which encourages him to know many aspects of reality. In addition to being exciting and entertaining, it allows children to develop a level of creative thinking to face life's circumstances.²³

Video games incorporate activities that are also carried out at school, such as collaborative work. Both in video games and in school, children work in teams to achieve common goals. Leadership is worked in the same way, since the player frequently has the role of the boss or leader who manages or leads a group of characters or other players who follow his orders to complete the objective. Also, not being able to fix a gambling problem, the player looks for solutions on his own initiative and, of course, by the motivation of the game, in different media. This is very important since these activities generate self-learning. Many games incorporate complex problems; To solve them, the user looks for solutions in the media that are achievable at their own pace, since motivation moves them to generate and be responsible for their own learning, which is often not achieved in school.

Video games reinforce responsibility in managing tasks in a timely manner in children. For example: in games that are played online, or that handle real-time (although sometimes accelerated, to cite one case, an hour can be equivalent to a day in the game), activities have to be carried out in which the time is a vital factor and cannot be manipulated by the user.²⁴ It has to be respected, and if the activities are not carried out within the established time range, there are consequences. Video games generate significant learning among children since they learn what they play because they live it within the simulation of the video game, taking into account that video games are a representation of reality with fictional variants, but in the end, they always start from reality. Meaningful learning takes place when what is lived is related to what is taught. In the video game, it is possible to practice as many times as desired without fear of being wrong, since failure does not represent great losses (Barriopedro et al., 2020).²⁵

Video games manage to develop thinking skills, competencies and generate knowledge in children; in other words, its benefits are clear. However, there is also a small gap with the disadvantages, which consist of addiction and a sedentary lifestyle, which leads to other side effects. The essence of video games must be incorporated into the teaching-learning process, as is already happening in some educational institutions.

METHODOLOGY

Research Design of Study

The research design, in general, can be classified into two types namely qualitative research design and quantitative research design. This correlational research was carried out in Karachi analyse

²² M.De Castro, Giumini, G., Marsano, M., Zona, U., & Bocci, F., Video Games in Education: an Analysis beyond Prejudice. In *Conference Proceedings. The Future of Education*, 2018, (pp. 359-362). libreriauniversitaria. It Edizioni.

²³ Op.Cit.,Horowitz., 379-410.

²⁴ T.Anastasiadis, Lampropoulos, G., & Siakas, K., Digital game-based learning and serious games in education. *International Journal of Advances in Scientific Research and Engineering (ijasre)*, 4(12), 2018, 139-144.

²⁵ Op.Cit.,Barriopedro et al., 240-257

the perception of teachers regarding the relationship between modern video games and life skills of primary level students in private sector of Pakistan. A quantitative research design is deemed to be appropriate for this study as there are two variables involved that need to be analysed. To this end, a survey has been carried out with 67 teachers belonging to different schools in Karachi. The responses of the participants will be analysed by the means of SPSS 21 which is a comprehensive statistical tool.

Population and Sampling

The target population of this research was the teachers from different educational institutes belonging to the private sector of Pakistan. In order to select the participants, the researcher utilized the purposive sampling technique which allowed the researcher to classify the subjects in accordance with the criteria that were grounded on the problem of the research. The application of purposive sampling facilitated the collection of the information which was directed towards the topic under research for the reason that the participants of the study were the teachers of the primary sector. In other words, the purposive sampling technique enabled the researcher to gather data that was associated with the variables of the study. Along these lines, the sample size of the research comprised 67 teachers from different educational institutions in Karachi.

Data Collection

The entire research was carried out according to the quantitative research design and the data was gathered through primary research. Along these lines, the primary data was obtained by the means of the survey with the teachers from the primary schools in Karachi. The survey was prepared through Google Forms and distributed to the participants of the research. The participants were given a duration of two weeks in order to complete the survey. The questionnaire was explicitly designed to collect information regarding perception of teachers regarding the relationship between modern video games and life skills of primary level students in private sector of Pakistan.

On the other hand, the researcher also performed comprehensive secondary research to gain an in-depth analysis of the impact of video games on the academic performance of the students as well as the barriers that impede the integration of video games into education. The secondary information was obtained through various data sources such as EBSCO host, Sage, and Emerald along with Google scholar which gave the researcher access to an assortment of the articles related to video games and their impact on child's learning. It is eminent to mention here that the research studies transcribed in English were only selected for this research.

Pilot Testing

A pilot study has been performed with 10 teachers in order to assess the reliability and validity of the research instruments. Along these lines, three items in the questionnaire were improved to avoid ambiguity.

Research Instruments

The survey has been performed as the predominant element of this research study. It is comprised of two segments. The first section intended to get demographic information of the participants while the second section contained questions that aimed to analyse perception of teachers

regarding the relationship between modern video games and life skills of primary level students in private sector of Pakistan.

Validity and Reliability

The reliability and validity of the study were assessed through pilot testing as well as the Cronbach alpha test.

RESULTS & FINDINGS

Demographic Analysis

The preceding graph shows the demographic distribution of the participants of the research. Nearly, 91 percent of the population is comprised of females whereas 9 percent comprises males. The majority of the participants constituting nearly 48 percent of the total populace belong to the age group of 31-40 years whereas 15 percent of the participants of the research belong to the age group of 26-30 years. Moreover, a diminutive division of the population belongs to the age group of 61 and above. The participants belonging to the age group of 18-25 years constituted 20 percent of the population of the survey. 62 percent of the participants acquired Bachelors's Degree whereas 36 percent of the participants acquired a Master's Degree. Furthermore, 6 percent of the participants had a M. Phill education. Nearly 36 percent of the participants had a work experience of 5 years or less. On the other hand, 39 percent of the participants acquired nearly 5-10 years of experience. In addition, 12 percent of the participants had 10-15 years of experience. Where as 13 percent had 15 and above years of experience. The value of the Cronbach Alpha show that the research instrument was reliable.

Descriptive Analysis

The statistics revealed in the preceding pie chart showed that a significant number of the participants of the research agreed that the weak alignment of video games with curriculum acts as a huge barrier to its integration in the schools. This group of the participants responded to strongly agreed or agree on scale and constituted nearly 64 percent of the total population. On the other hand, on average 8 percent of the participants of the research had a neutral outlook towards the proposed statement. Furthermore, nearly 28 percent of the participants of the research disagreed as according to them weak alignment of video games with the curriculum is not the barrier to its integration in the schools.

The preceding question has been included in the questionnaire to find out whether the weak alignment of the video games with the state standards acts as a huge barrier to its integration in schools. Along these lines, nearly 70 percent of the participants agreed that the weak alignment of the video games with the state standards acts as a huge barrier to its integration in schools. These participants selected agree or strongly agreed as the choice of their response. In contrast, only a small percentage of the participants contradicted the statement indicating that the weak alignment of the video games with the state standards does not act as a huge barrier to its integration in schools and they constituted 20 percent of the total population.

Modern Video Games

The above chart demonstrates the participants' viewpoints when asked to reflect on the conception that lack of supporting materials acts as a barrier to adoption of video games in schools. In the viewpoint of a significant number of participants lack of supporting materials acts as a barrier to adoption of video games in schools. These participants constituted on average 53% of the total populace.

As per the outcomes, nearly 63 percent of the respondents through their responses agreed that the high cost of integration act as a barrier to the adoption of video games in schools. In contrast, 28 percent of the participants of the survey presented their viewpoints in disagreement with the above statement. According to them, the high cost of integration does not act as a barrier to the adoption of video games in schools. Nearly 8 percent of the respondents shared a neutral perspective.

Correlation Analysis

The statistics illustrated in the preceding correlation matrix suggest that there is a significant relationship between leadership skills and problem solving skills. The value of correlation is found to be 0.751 which depict that a positive as well as strong correlation exists among both the variables. In addition, the value of significance is found to be 0.034 which show that both leadership skills and problem-solving skills are significantly related. In the light of these results, it can be deduced that leadership skills of children and problem solving proficiency are strongly correlated. There is a significant relationship between leadership skills and creativity. Along these lines, the results of the correlation test suggest that both the variables are positively correlated.

The Pearson correlation value is found to be 0.734 while the value of significance is 0.037. The statistics illustrated in the preceding correlation matrix suggest that there is a significant relationship between leadership skills and creativity. The value of correlation is found to be 0.714 which depict that a positive as well as strong correlation exists among both the variables. In addition, the value of significance is found to be 0.043 which show that both problem solving and creativity are significantly related. In the light of these results, it can be deduced that a good positive relationship exists between creativity and problem solving skills. The preceding table demonstrate the outcomes of the T-Test that has been executed to determine if there is a difference between male and female teachers' perception regarding the influence of video games on the life skills of students from primary levels. The outcomes affirm that there is a significant difference in the male ($M = 2.1322$, $SD = 0.68715$) and female teachers scores ($M = 1.8430$, $SD = 0.30628$), $p = 0.045$ regarding their perception on the impact of video games on life skills.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.844a	0.675	0.004	1.32

a. Predictors: Playing Video Games
b. Dependent Variable: Improvement in Life skills

The above table demonstrates the outcomes of the regression analysis that was carried out in order to analyze the impact of video games on the improvement of life skills of the children . The value of R depicts the outcomes of the correlation test. In the given case, the value of R was 0.844 which

showed that there was a strong correlation between video games and the improvement of life skills of the children.

Table 7: One-Way Anova

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.182	6	1.864	1.070	.025b
	Residual	193.369	111	1.742		
	Total	204.551	117			

a. Dependent Variable: Improvement in Life skills
b. Predictors: (Constant), Playing Video Games

The above table displays the outcomes of the Anova test that was performed in order to test the hypothesis of the research. The value of significance is 0.025 which is less than 0.05 implying that the null hypothesis can be rejected while the alternative hypothesis can be accepted. Therefore, in the light of the preceding outcomes, it can be deduced that video games have a significant impact on the life skills of the children.

Summary of Findings

In this particular research, the researcher performed a survey in order to generate the findings. Along these lines, an assortment of the findings was produced through the outcomes of the survey. For instance, the outcomes of the research indicated that video games help children in enhancing their problem-solving skills as well as creativity along with learning capacity. On the other hand, the majority of the participants came to the agreement that video games play a significant role in boosting leadership skills among the student as well as their motivation levels. Furthermore, the findings of the research revealed that video games play an important role in enhancing the technical skills of the student. The research also seeks to analyse the barriers that impede the adoption of the videogames into schools. To this end, the findings of the research revealed that the high cost of integration and lack of materials act as barriers to the successful adoption of the videogames in schools. In addition, it was also found that the weak alignment of the videogames with state standards as well as curriculum limits its incorporation in the primary schools across the country. The outcomes of the hypothesis testing confirmed that video games have a significant impact on the life skills of the children.

Discussion

The primary research performed by the researcher led to several interesting findings. For paradigm, one finding of the research suggested that there is a positive and significant relationship between leadership skills and problem solving skills. This finding of the research was in line with the study carried out by Rudis & Postic., (2017) who noted that there is a direct as well as indirect link between the leadership and problem solving skills. The direct link is reflected through key leadership behaviours which describe supreme quality of the problem solving. Another finding of the study demonstrated that there is a significant and positive relationship between leadership skills and creativity. This finding was in harmony with the research carried out by Barriopedro et al., (2020). The authors noted that leader's own level of the creativity is the core element of the effective leadership which lead to effective decision making.

The outcomes of the primary research illustrated that problem solving skills and creativity of the students are positively correlated. . The value of correlation is found to be 0.714 which depict that a positive as well as strong correlation exists among both the variables. In addition, the value of significance is found to be 0.043 which show that both problem solving and creativity are significantly related. This finding of the research has been supported by the research conducted by Atma et al., (2020). According to the authors, the knowledge of the person pertaining to the problem-solving is not sufficient for him to solve all the issues confronted by him. In fact, it is vital to produce creative solutions to a problem this is because while certain issues have definite solutions, other might not. Therefore, creative thinking play a noteworthy role in problem solving.²⁶

Furthermore, the results of the T-Test demonstrate that there is a significant difference in the male (M = 2.1322, SD = 0.68715) and female teachers scores (M = 1.8430, SD =0.30628), p= 0.045 regarding their perception on the impact of video games on life skills. Lastly, the outcomes of hypothesis testing showed that playing video games have a significant impact on the improvement of life skills of the primarily level students from the private sector of Pakistan. This finding of the research was in accordance with the findings of the research carried out by Papastergiou., (2009). According to the researchers, cooperative video games requisite the entire team to organize themselves to accomplish same goals. This in turn encourages the children to plan joint strategies, communicate with each other and decide on the best way of overcoming obstacles while playing. Problem solving and creativity are two essential skills both academically as well as personally. Playing video games contribute to acquire these skills by the students and implement them on daily basis at schools or home. Similarly, the research carried by Castro et al., (2018) noted that regular use of videogames during childhood stimulate changes in the brain that in turn enhance their attention and critical thinking ability.²⁷

Conclusion

Through the years scholars have been able to appreciate the way in which human beings seek to innovate and grow continuously, having the need to improve their environment and without tiring looking for the means to do so. That is why the progress of science, research, knowledge, and technology are so evident. Despite the fact that this phenomenon has always been seen, today its progress is increasingly surprising. As a consequence, it has caused society to wonder if these new media are human functions or are only recommended because they are new and cause curiosity. One of the issues, related to technology that has been questioned is the use of video games.

The appearance of video games meant a break in the paradigm that was held about what "fun for children" was. Previously, children's games were associated with physical activity, creativity, recreation, companionship, and leadership. The video game, for its part, proposes a sedentary, solitary fun that does not require initiative and that generates dependency, which is in contrast to what we used to have as the concept of "children's games". However, it was initially well-received by users who appreciated this novel and attractive idea. Today parents, educators, adolescents,

²⁶ Op.Cit.,Atma et al.,

²⁷ Op.Cit.,Castro et al.,

psychologists are questioning whether video games, instead of providing opportunities for development, are generating risks and obstacles in their training.

Video games improve cognitive functions such as attention, memory, and processing speed. They also improve memory, making it increasingly sharp. They also promote problem-solving in an efficient and fast way, so it is ensured that a person who usually plays video games is able to decide 25% faster than another who does not play. In addition, you can quickly achieve more efficient deductive reasoning. It can be said then that the recently created video games are capable of developing many transcendental aspects in the development of the person and therefore also in the child who is much more prepared to learn. It can be concluded that the role played by video games in the development of the child depends mainly on the conditions in which they are played. If this behavior is supervised, controlled, and supported by an adult, children will be able to educate critical judgment and use this tool to create good and lasting knowledge. Video games open windows for learning because they influence attention, memory, processing speed, vision, creativity. These windows, if used well, will achieve adequate development and even many times higher than that of other children with the same conditions.

Recommendations for future Studies

This research adopted quantitative research design to analyze the role of video games in children education. However, due to limited sample size, the findings of the study cannot be generalized to large population. Therefore, it is suggested that future studies incorporate a large sample size. In addition, it is suggested that studies in future make use of mixed study design to examine the role of video games in child development.

REFERENCES

- Al-jifri, A. A., The impact of video games in the acquisition of English language: The case of Saudi youths. *Journal of Foreign Language Education and Technology*, 2(2), 2017,15-35.
- Anastasiadis, T., Lampropoulos, G., & Siakas, K., Digital game-based learning and serious games in education. *International Journal of Advances in Scientific Research and Engineering (ijasre)*, 4(12), 2018, 139-144.
- Atma, A. M. A., Azmi, M. N., & Hassan, I., The Influence of Modern Video Games on Children's Second Language Acquisition. *International Journal of Scientific and Technology Research*, 9(8), 2020, 319-323.
- Barr, M. , Video games can develop graduate skills in higher education students: A randomized trial. *Computers & Education*, 113, 2017, 86-97.
- Barr, M., Student attitudes to games-based skills development: Learning from video games in higher education. *Computers in human behavior*, 80, 2018, 283-294.
- Barriopedro,N., Estela, Sanz-Gómez, Yeray, & Ravina-Ripoll, Rafael. Videogames in Education: BenefitsandHarms. *Revista Electrónica Educare*, 24(2), 2020, 240-257. Epub May 01, 2020.<https://dx.doi.org/10.15359/ree.24-2.12>

Modern Video Games

- Boon, E., & Tobias, J.. Mortal Kombat. *Encyclopedia of Video Games: The Culture, Technology, and Art of Gaming*, 1, 2012, 420.
- Casan-Pitarch, R., An approach to digital game-based learning: Video-games principles and applications in foreign language learning. *Journal of Language Teaching and Research (Online)*, 9(6), 2018, 1147-1159.
- De Castro, M., Giumini, G., Marsano, M., Zona, U., & Bocci, F. , Video Games in Education: an Analysis beyond Prejudice. In *Conference Proceedings. The Future of Education* , 2018, (pp. 359-362). libreriauniversitaria.it Edizioni.
- Hassan, I., The Influence of Modern Video Games on Children's Second Language Acquisition. 2020, *Available at SSRN 3680020*.
- Horowitz, K. S., Video Games and English as a Second Language: The Effect of Massive Multiplayer Online Video Games on the Willingness to Communicate and Communicative Anxiety of College Students in Puerto Rico. *American journal of play*, 11(3), 2019, 379-410.
- Kafai, Y. B., Heeter, C., & Denner, J. (Eds.), *Beyond Barbie and Mortal Kombat: New perspectives on gender and gaming*, 2008, Mit Press.
- Kenwright, B., A brief review of video games in learning & education how far we have come. In *SIGGRAPH Asia 2017 Symposium on Education* (pp. 1-10).
- Papastergiou, M., Exploring the potential of computer and video games for health and physical education: A literature review. *Computers & Education*, 53(3),2009, 603-622.
- Rudis, D., & Postić, S., Influence of video games on the acquisition of the English language. *Verbum*, 8, 2017, 112-128.
- Sánchez-Mena, A., Martí-Parreño, J., & Aldás-Manzano, J., The Effect of Age on Teachers' Intention to Use Educational Video Games: A TAM Approach. *Electronic Journal of e-Learning*, 15(4), 2017, 355-366.