

Exploring the Nexus of Mobile Gaming Habits Interpersonal Relations and Demographics: A Study on School Going Adolescents

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Abstract:

In an era defined by technological immersion, the prevalence of mobile gaming habits among adolescents has become a significant area of inquiry. The present study examined mobile gaming habits among school going adolescents in relation to interpersonal relations and demographic variables on a sample of 800 students of four districts of Punjab. Mobile gaming habits and Interpersonal relations of adolescents were measured by self-constructed tools. Results revealed the negative relationship between mobile gaming habits and interpersonal relations of school going adolescents. Significant difference was found in mobile gaming habits of male and females. Significant difference was found in mobile gaming habits among students from nuclear and joint family students. But no significant difference was found in students of age. This study contributes to the broader understanding of the digital landscape influence on interpersonal relations of adolescents. It highlights the need for a balanced approach in harnessing the potential benefits of mobile gaming while mitigating its potential negative impacts. Educators, parents, and policymakers can draw upon these findings to foster an environment where technology is integrated thoughtfully, enhancing interpersonal relations and holistic development.

Keywords: mobile gaming habits, adolescents, interpersonal relations, demographic variables

1. INTRODUCTION

As, we are living in the technological era. It seems in today's world children are born digital. From the young toddlers to teens, adolescents appear to be able to navigate the world of technology, using range of gadgets for pleasure, social connectivity, education, communication and convenience. The past two decades had witnessed a virtual explosion in new technology, including cell phones, MP-3s, Digital video discs and Personal digital assistants (Mutisya, 2013). This new technology has eagerly embraced by adolescents and has led to an expanded vocabulary, instant messaging, blogging and providing amusement. India has the highest rate of smartphones users (Jayalakshmi et al., 2017) and second largest mobile phones user's country with over 900 million users (Garelli and Ranu, 2017). Now a day, the playing digital games have spread in children, youngsters and adults (Zeinali, 2018). Mobile games are one of the most accessible form of entertainment in this modern era of technology and becoming fast growing and popular section of game industry (Qingwei and Ting, 2011).

Besides, during the COVID-19 period, the situation of playing mobile games and spending more time in games has increased (Amin et al., 2022; Narusk, 2020) also the reason for the dramatic increase in the time devoted to online mobile games is that games have now become a social interaction tool with many social

features (Louie, 2021). Mobile games are enjoyed by both males and females because of its entertaining features. More than half of the Indian population and a billion people across worldwide are playing video and mobile games and the number is enriched because of the fast-growing portable devices, like android-powered and IOS devices, and social networking websites, such as facebook, twitter etc. (Liu et al. 2016).

Thus, it is undeniable that adolescents who are habitual to mobile games are increasing. But a question has arisen: Why the adolescents become addictive to mobile games? One of the reasons is the interpersonal relations of adolescents with family, peers, friends and teachers.

1.1 Conceptual Framework

1.1.1 Mobile Gaming Habits

Mobile gaming is a dominant form of gaming, recognised for game characteristics and its portability that motivate continuous play and spending (Syvertsen et al., 2022). Mobile gaming habit is compulsive or uncontrolled play of mobile games, in such a way that cause problems in other areas of person's life. Game addiction is a situation where an individual cannot stop playing the game for a long time, relate the game to his real life, do not carry out his responsibilities due to the games, and prefer it to other daily activities (Eni, 2017). Internet gaming addiction is a widespread across the world irrespective of the development stages of human beings (Dsouza and Dolma, 2019). Mobile gaming addiction or habits or disorder is the will of the individuals to play mobile games for a sufficient long time. The routine schedule of the individuals, their academic performance and their relations with the family and peers are disturbed due to excessive gaming habits (Dsouza and Dolma, 2019).

The individuals suffering from gaming habits use the virtual fantasy world to contact with the real people through the internet, as the substitution for real life human connection, which are unable to achieve normally. Some suffering from gaming habits may develop an emotional attachment to online friends and activities they create on their mobile screen. They also socialize and exchange ideas through games because some games require a large number of players to log on same time, for long duration of time, to complete a game task. Gamers may be feeling an obligation and duty towards other gamers. This may further the individual's justification of his sense of relationships with other gamers that are otherwise strangers.

Video gaming is a unique behavioural addiction which presents in itself as compulsive gaming habits, mood swings, social isolation, decreasing imagination, excessive focus on achievement in score in games and to the exclusions of all other activities of life (Schivinski et al., 2018). Although there are various studies talking the game addiction issues, they focused on other kinds of games like online games and video games rather than mobile games. A finer understanding of mobile game addiction can be achieved only when the chief features of mobile games are considered. There are two key features that influence on individuals' mobile game playing behaviours.

- ❖ Playing games on mobiles bring pleasure and enjoyment to users.
- ❖ Mobile games can be regarded as a hedonic technology because individuals use mobile games for experiential and hedonic values rather than for instrumental and utilitarian values (Heijden, 2004).

One of most popular, adventures and action mobile game is PUBG which is widely spread in these days. It was launched on smartphones on March, 2018. This game is played by the all individuals of different developmental stages and both male and female are not spared. The individuals who regularly play this game are addicted and has cause ill-effects (D'Souza et al., 2019). The Punjab and Haryana high courts has directed union minister of information and technology to ban this game which teaches only violence to the individuals as to shoot and kill the opponents (Sharma, 2019). Entertainment games are more prone to addictive. This

game can cause children to have bad behaviour. Taylor (2016) gave the following signs of excessive mobile gaming habits among adolescents.

1. **Psychological Signs:** Decreased interest in school, homework, academic achievement, becoming visibly angry when not allowed to play, becoming depressed or anxious when access to mobile video games is limited, thinking about the game when involved in other activities, dreaming about the games, loss of interest in activities previously enjoyed, arguing about the negative impact of excessive play, and down playing how serious the problem is, distorted perceptions of time, feelings of excessively responsibility to a guild, clan, or online team, great difficulty abstaining from the video game for a period of time, feeling of guilt or regret after long period of gaming (Janardhan and Chandran, 2018; Kaur and Kaur, 2018; D'Souza and Dolma, 2019).
2. **Physical Signs:** Sleep difficulties and changes to sleep schedules (Yarasani et al., 2018; D'Souza and Dolma, 2019) decreased attention to personal hygiene, poor or irregular eating habits, (Berkey et al., 2000), headaches, eye sores and dry eyes decreased levels of physical health. Gaming addiction may lead to many physical and psychological negative effects on individuals, especially adolescents (Kaplan, 2017; Kaya, 2013).
3. **Behavioural Signs:** These include decreased academic performance usually a gradual decrease or decline (Chan and Rabinowitz, 2006; Sharif and Sargent, 2006) over time, less effort into homework, neglect of other important responsibilities so as to keep gaming (irrespective of rewards such as allowances or pocket money), more and more time playing the games, (Witt et al., 2011) attempts to play at the first available opportunity (upon walking, upon return from school, upon walking during the middle of the night), an inability to quit a desire to do so. Frequently busy with reading about the games, discussing the games with fellow players in online forums, writing about the strategy of the game.
4. **Relational Signs:** The player may lie to parents when it became apparent that the game may be limited or restricted in some way. He would rather play games on mobile than playing socially with friends or going outside (Dename, 2014; Sabella, 2010). The child and adolescents blame others for their excessive gaming, including that they play due to parental nagging.

1.1.2 Interpersonal Relations

An interpersonal relationship is the relation between two or more people that may range from unstable to stable. Subjective quality of interpersonal relationships pertains to personal schema for thinking concerning individuals and social situations across social contexts. Interpersonal relationship has been defined as the interaction of individuals with respect to the patterns of emotions, thoughts and behaviour (Plutchik, 1997). In other words, it is supposed to be an association between individuals interacting in formal and informal situations that develop with the time. As we are social beings, and we are evolutionarily predisposed to be affected by the quality of our interpersonal relationships (Segrin and Taylor, 2007).

Relationships with peers and teachers are of central importance to children throughout childhood and adolescence. They provide companionship and entertainment, help in solving problems, personal validation and emotional support, and especially during adolescence, a foundation for identity development. Positive peer interactions tend to promote the development of perspective-taking and empathic skills that serve as bases for cooperative, pro social, and non-aggressive type of behavior; positive relationship with peers also have been related consistently to range of positive academically related accomplishments (Wentzel, 2014). Adolescence is a critical stage for mental and physical development, during which the development of positive interpersonal relations are the foundation for entry into society (Seo et al., 2009). On the contrary, if effective

interpersonal relations are not developed, various psychological issues will arise, such as depression, anxiety, aggression, and maladjustment (Leman et al., 2017; Zhang et al., 2018). Mobile gaming habits influence the interpersonal relationship of students in many ways.

1.1.3 School Going Adolescents

The word adolescence is derived from Latin word *adolescere* which means to grow up or to mature. It is a period of transition between childhood and adulthood that involves a number of changes in body and mind. During this stage, the curiosity and experimentation at one time paves the path to success and at other, may cause uncertainty. This is a critical time in life because the experiences, knowledge and skills acquired in adolescence have important implications in adulthood. In this study, it refers to the school-going adolescents whose age range from 13-16 years old studying in ninth grade in different government and private schools of Punjab.

1.2. Operational Definitions of Variables

1. **Mobile Gaming Habits:** Mobile gaming habits refers to compulsive behaviour of school students reflected by repetitive use of mobile phones for playing games which may lead to corresponding degree of withdrawal, obsession, mood modification, and malfunction which are measured by mobile gaming habits scale prepared by the researcher.
2. **Interpersonal Relations:** Interpersonal relations in the present context refers behaviour patterns that characterize the adolescent's relation with family, peers, friends and teachers which may lead to the degree of satisfaction level that may fall from poor to good or negative to positive on the basis of provided affection, involvement, emotional support and conflict which are measured by interpersonal relations scale prepared by the researcher.

1.3: Rationale of the study

Mobile games in recent years have become one of the most popular hobbies among adolescents due to its diverse and attractive features. Parents across the globe are increasingly concerned about their children online and offline gaming habits. They are sure that there is problem but counsellors unfamiliar with mobile game addiction don't understand how seductive they can be (Young, 2010). Past researches on mobile game habits among adolescents discovered consistent link to increased level of aggression, mood disorders, anxiety, suicide, sleep disturbance, hypertension, headache and lack of involvement in social activities (Kaplan, 2017; Yarasani et al., 2018; D'Souza and Dolma, 2019). The contact-making nature of these games proved a solution against the social isolation caused by the pandemic (Marston and Kowert, 2020). Video games, beyond the individual reaction, can be community building and maintaining relationships (Pisan, 2007; Quwaider, et al., 2019). These online environments provide a place for men and women to interact socially on a regular basis without the normal social restriction they face in offline relationships, and their friends, spouses and families may be ignorant of the extent and value of these relationships (Parks et al., 2011). Due to increase awareness that mobile gaming habit is a legitimate concern, efforts to explain why and how children are deeply involved in these games have become important research issue. On the basis of non-conclusive results related to effect of mobile gaming habits on school-going adolescents especially in Indian context, it was thought worthwhile to study the relationship of mobile gaming habits and interpersonal relations of school going adolescents.

1.3.2. Statement of the Problem:

Exploring the Nexus of Mobile Gaming Habits, Interpersonal Relations and Demographics: A Study on School-Going Adolescents

1.3.3 Objective of the study

The present study was undertaken with the following objectives:

1. To study the relationship between mobile gaming habits and interpersonal relations of school going adolescents across gender, age and type of family.

1.3.4. Hypothesis of the study

1. There is no significant relationship between mobile gaming habits and interpersonal relations of school going adolescents across gender, age and type of family.

II. METHOD

2.1 Sample

In this study, the sample size was 800 school going adolescents and among them 400 was male and 400 were female. Data were collected from different schools located in four districts of Punjab in rural and urban areas by using stratified random sample method and based on the following inclusion criteria.

2.2 Tools

In this study two scales have been used. These are described below:

2.2.1. Mobile Gaming Habits Scale: It was constructed and standardised by researcher herself to assess adolescents' mobile gaming habits. A five-point Likert scale was developed and used to identify the mobile gaming habits of school going adolescents and its dimensions (withdrawal, obsession, mood modification, malfunction). The scale consists of 39 items. The reliability of the scale was calculated by using Cronbach Alpha which came out to be 0.84 which indicates that the mobile gaming habits scale may be considered highly reliable.

2.2.2. Interpersonal Relations Scale: It was constructed and standardised by researcher herself to assess adolescents' interpersonal relations with family, peers, friends and, teachers. A five-point Likert scale was developed and used to identify the interpersonal relations and its dimensions (relations with family, relations with peers and friends, relations with teachers). The scale consists of 42 items. The reliability of the scale was calculated by using Cronbach Alpha which came out to be 0.81 which indicates that the interpersonal relations scale maybe considered highly reliable.

Validity of scales: In both scales, Face validity and Content validity were tested.

2.3 Procedure

The purpose of the present study is to examine the mobile gaming habits in relation to interpersonal relations among school going adolescents of Punjab. The data was collected from a stratified random sample of 800 students of different schools of Jalandhar, Patiala, Fazilka, and Barnala districts with the help of socio-demographic sheet, mobile gaming habits scale, and interpersonal relations scale. These scales were administered to subjects individually who were assured that the information given by them

would be kept confidential and would be used only for research purposes. Necessary permission was also sought from the DEOs and heads of the respective schools for the purpose of data collection through a formal request letter. The scales were administered on the ninth grade students that were selected randomly from the selected schools.

III. RESULT AND DISCUSSION

The data were statistically treated by using SPSS and following results are found. To ascertain the relationship between mobile gaming habits and interpersonal relations across gender (male and female), age (13 years, 14 years, 15 years, 16 years) and type of family (nuclear and joint) of school going adolescents, Pearson’s Product Moment correlation was employed. The coefficient of correlation between interpersonal relations and dimensions of mobile gaming habits and overall mobile gaming habits of school students across gender x age x type of family are listed in the table below.

Table: 1 Mobile Gaming Habits among School Students in relation to Interpersonal relations across Gender, Age and Type of Family

| Mobile Gaming Habits | Total (800) | Male (400) | Females (400) | 13 years | 14 years | 15 years | 16 years | Nuclear | Joint |
|------------------------------|-------------|------------|---------------|----------|----------|----------|----------|---------|---------|
| Withdrawal | -0.23** | -0.20** | -0.37** | -0.24** | -0.28** | -0.24** | -0.14* | -0.10* | -0.37** |
| Obsession | -0.24** | -0.25** | -0.34** | -0.27** | -0.29** | -0.21** | -0.22** | -0.12** | -0.39** |
| Mood Modification | 0.21** | 0.16** | 0.11* | 0.20* | 0.27** | 0.20** | 0.18** | 0.15** | 0.18** |
| Malfunction | -0.32** | -0.29** | -0.40** | -0.19* | -0.41** | -0.32** | -0.25** | -0.24** | -0.39** |
| Overall Mobile Gaming Habits | -0.21** | -0.22** | -0.38** | -0.17 | -0.27** | -0.22** | -0.16* | -0.12** | -0.36** |

** Significant at .01 level

* Significant at .05 level

(Source: Primary data collected for the study)

The perusal of table1 reveals the co-efficient of correlation between withdrawal habit of mobile gaming and interpersonal relations in case of total sample of school students, male students, females students, students aged 13, 14, 15 and 16 years, students from nuclear and joint families came out to be -0.23, -0.20, -0.37, -0.24, -0.28, -0.24, -0.14, -0.10, -0.37 respectively, all of which are significant at 0.05 level. This indicates that there is a significant and negative relationship between withdrawal dimension of mobile gaming and interpersonal relations of school students across gender, age and type of family.

Further table 1 reveals the co-efficient of correlation between obsession habit of mobile gaming and interpersonal relations in case of total sample of school students, male students, female’s students,

students aged 13, 14, 15 and 16 years, students from nuclear and joint families came out to be -0.24, -0.25, -0.34, -0.27, -0.29, -0.21, -0.22, -0.12, -0.39 respectively, all of which are significant at 0.01 level. This indicates that there is a significant and negative relationship between obsession dimension of mobile gaming and interpersonal relations of school students across gender, age and type of family.

Table 1 reveals the co-efficient of correlation between mood modification habit of mobile gaming and interpersonal relations in case of total sample of school students, male students, female's students, students aged 13, 14, 15 and 16 years, students from nuclear and joint families came out to be 0.21, 0.16, 0.11, 0.20, 0.27, 0.20, 0.18, 0.15, 0.18 respectively, all of which are significant at 0.01 level. This indicates that there is a significant and positive relationship between mood modification dimension of mobile gaming and interpersonal relations of school students across gender, age and type of family.

Table 1 reveals the co-efficient of correlation between malfunction habit of mobile gaming and interpersonal relations in case of total sample of school students, male students, female's students, students aged 13, 14, 15 and 16 years, students from nuclear and joint families came out to be -0.32, -0.29, -0.40, -0.19, -0.41, -0.32, -0.25, -0.24, -0.39 respectively, all of which are significant at 0.01 level. This indicates that there is a significant and negative relationship between malfunction dimension of mobile gaming and interpersonal relations of school students across gender, age and type of family.

Table 1 reveals the co-efficient of correlation between mobile gaming habits and interpersonal relations in case of total sample of school students, male students, females students, students aged 13, 14, 15 and 16 years, students from nuclear and joint families came out to be -0.21, -0.22, -0.38, -0.17, -0.27, -0.22, -0.16, -0.12, -0.36 respectively, all of which are significant at 0.01 level. This indicates that there is a significant and negative relationship between total mobile gaming habits and interpersonal relations of school students across gender, age and type of family.

On the basis of the above results, it may be concluded that there exists a significant negative relationship between mobile gaming habits and interpersonal relations of school students across gender, age and type of family. Hence the hypothesis that there exist no significant relationship between mobile gaming habits and interpersonal relations of school going adolescents across gender, age and type of family is rejected.

IV. FINDINGS

The epitome of this study shows the following: When interpersonal relations go better of the participants, then the mobile gaming habits levels may decrease. If the adolescent's relation with others are congenial or good, it can be hoped that they would be able to control over mobile gaming habits. Finally, this study brought out an understanding between mobile gaming habits and interpersonal relations among school going adolescents. It revealed that the interpersonal relations are related to mobile gaming habits of adolescents. But, to have, wider understanding, the sample size should be increased.

V. EDUCATIONAL IMPLICATIONS

To avoid heavy usage of mobile games, parents should try to keep family environment healthy, supportive, stress-free, empathetic, affectionate and congenial so that children must feel connected with the family rather than switching into virtual world for search of virtual friends to seek warmth and support. Parents and teachers should keep a check on students, and also on the companies who design such addictive action games and assure that students play those mobile games which have some logical or educational value (Kaur, 2018). In nutshell, it may be recommended that the school students should be provided with timely

support and the counselling to have a sense of control over own activities and to boost their confidence level so that the incidence of mobile gaming habits can be reduced. This should be joint effort of teachers, parents and counsellors.

REFERENCES

1. Amin, K. P., Griffiths, M. D., & Dsouza, D. D. (2022). Online gaming during the COVID-19 pandemic in India: Strategies for work-life balance. *International Journal of Mental Health and Addiction*, 20 (2), 296–302.
2. Berkey, C. S., Rockett, H. R. H., Field, A. E., Gillman, M. W., Frazier, A. L., Camargo, C. A., & Colditz, G. A. (2000). Activity, dietary intake, and weight changes in a longitudinal study of preadolescent and adolescent male and females. *Pediatrics*, 105 (4), 56-65.
3. Chan, P. A., & Rabinowitz, T. (2006). A cross-sectional analysis of video games and attention deficit hyperactivity disorder symptoms in adolescents. *Annals of General Psychiatry*, 5 (1), 16-25.
4. Chen, L., Liu, R., Zeng, H., Xu, X., Zhu, R., Sharma, M., & Zhao, Y. (2018). Predicting the time spent playing computer and mobile games among medical undergraduate students using interpersonal relations and social cognitive theory: A cross-sectional survey in Chongqing, China. *International Journal of Environmental Research and Public Health*, 15 (8), 1664-1675.
5. DeName, K. (2018). Video games: Are they really a source of addiction? Psych Central, [Web log post]. Retrieved on March 18, 2020, from <http://psychcentral.com/blog/>
6. D'Souza, L., & Dolma, P. (2019). Extent of PUBG addiction among Indian and Tibetan Students: A comparative study. *International Journal of Indian Psychology*, 7(2), 482-488.
7. D'Souza, L., Samyukt, A., & Michael, M. (2019). Extent of PUBG addiction in south India: Influence of select demographic factors. *International Journal of Indian Psychology*, 7 (1), 1060-1066.
8. Eni, B. (2017). Evaluation of high school students digital game addiction and perceived parental attitudes (Ph.D. Thesis). Halic University, Institute of Social Science, Istanbul, Turkey. Retrieved from <http://www.tez.yok.gov.tr/>
9. Garelli, G., & Ranu, S. K. (2017). WhatsApp usage in relation to academic performance of college students- An exploratory study. *Psycho-Lingua*, 47 (2), 21-26.
10. Heijden, H. (2004). User acceptance of hedonic information systems. *MIS quarterly*, 28 (4), 695-704.
11. Jayalakshmi, G., Chidambaram, R., Srikumar, R., Vijayakumar, R., & Kumar, N. (2017). Online game addiction among adolescents in Pondicherry, India. *Journal of Addictive Behaviours, Therapy & Rehabilitation*, 6 (2), 168-175.
12. Kaplan, N. (2017). Internet addiction levels of secondary school students on health effects (Ph.D. Thesis). Izmir Katip Celebi University, Izmir, Turkey. Retrieved from <http://www.researchgate.net/publication/>
13. Kaur, J., & Kaur, L. (2018). Video game habits as predictor of aggression, life skills and academic performance of school going adolescents (Ph.D. Thesis). Punjabi University, Patiala.
14. Kaya, A. (2013). Development of online game addiction scale: validity and reliability study (Masters Dissertation). Gaziosmanpasa University, Tokat, Turkey.
15. Leman, P. J., Smith, E. P., & Petersen, A. C. (2017). Introduction to the special section of child development on positive youth development in diverse and global contexts. *Child Development*, 88 (2), 1039–1044.
16. Lemmens, J. S., Valkenburg, P., & Peter, J. (2009.) Development and validation of a game addiction scale for adolescents. *Media Psychology*, 12 (1), 77–95.

17. Liu, C. H., Lin, S. H., Pan, Y. C., & Lin, Y. H. (2016). Smartphone gaming and frequent use pattern associated with smartphone addiction. *Medicine*, 95 (28), 3561-3575.
18. Louie, A. (2021). Mobile gaming demographics statistics: 2021 data on market share & spending. Retrieved from <https://financesonline.com/mobile-gaming-demographics/>
19. Mu, S. Z. (2006). Harmfulness of internet addiction disorder to college students mentally and physically and its countermeasures. *Journal of Practical medical techniques*, 17 (6), 24-34.
20. Mutisya, S. (2013). Influence of electronic media on behaviour problems among selected Kenyan secondary school Students. *International Journal Advances in Social Science and Humanities*, 1(1), 29-40.
21. Narusk, K. (2020). The impact of lockdown on mobile gamers behaviours. Retrieved on August 17, 2020, from www.https://medium.com/googleplaydev/the-impact-of-lockdown-on-mobile-gamers-behaviors-dffb05f07c4e
22. Park, J., Song, Y., & Teng, C. I. (2011). Exploring the links between personality traits and motivations to play online games. *Cyber Psychology, Behaviour and Social Networking*, 4 (12),747-751.
23. Plutchik, R. (1997). The circumplex as a general model of the structure of emotions and personality. In R. Plutchik & H. R. Conte (Eds.), *Circumflex Models of personality and emotions*. American Psychological Association (pp. 17-46). Washington, D.C: American Psychological Association.
24. Pisan, Y. (2007). My guild, my people: Role of guilds in massively multiplayer online games. *Proceedings of the 4th Australasian Conference on Interactive Entertainment*, 20 (1), 1-5. Retrieved from <http://doi/10.5555/1367956.1367976>
25. Qingwei, M., & Ting, L. (2011). Identity based authenticated key exchange for mobile gaming platform. *Energy Proceeding*,103 (2), 6436-6441.
26. Quaider, M., Alabed, A., & Duwairi, R. (2019). The impact of video games on the player's behaviors: A survey. *Procedia Computer Science*, 151, 575–582.
27. Sabella, R. A. (2010). Negative potential of video games. Retrieved from <http://www.education.com//reference/article/negative-potential-video-games/>
28. Schivinski, B., Brzozowska-Wos, M., Buchanan, E. M., & Griffiths, M. D. (2018). Psychometric assessment of the internet gaming disorder diagnostic criteria: An item response theory study. *Addictive Behaviour Reports*, 8 (1), 176-184.
29. Seo, M., Kang, H. S., & Yom, Y. H. (2009). Internet addiction and interpersonal problems in Korean adolescents. *Computer Informatics Nursing*, 27 (3), 226–33.
30. Sergin, C. G., & Taylor, M. (2007). Positive interpersonal relationship mediates the association between social skills and psychological well-being. *Personality and individual difference*, 43 (4), 637-646.
31. Sharma, N. (2019). Punjab and Haryana high court directs IT ministry to ban online PUBG. *The Times of India*. Retrieved on December 17, 2020, from [http:// www.timesofindia.com](http://www.timesofindia.com)
32. Sharif, I., & Sargent, J. D. (2006). Association between television, movie, and video game exposure and school performance. *Pediatrics*, 118 (2), 1061-1070.
33. Syvertsen, A., Ortiz, A., King, D. & Pallesen, S. (2022). Problem mobile gaming: the role of mobile gaming habits, context, and platform. *Nordic Studies on Alcohol and Drugs*, 1-17.
34. Wentzel, K., Russell, S., & Baker, S. (2014). Peer Relationship and Positive Adjustment at School. In J. Michael, R. Guilman & S. E. Huebner (Ed.), *Handbook of Positive Psychology in School* (2nd ed., pp.18). New York: Routledge.

35. Witt, E. A., Massman, A. J., & Jackson, L. A. (2011). Trends in youth video game playing, overall computer use and communication technology use: The impact of self-esteem and big five personality factors. *Computers in Human Behaviour*, 27 (2), 763-769.
36. Yarasani, P., Shaik, R. S., & Myla, A. R. R. (2018). Prevalence of addiction to online video games: gaming disorder among medical students. *International Journal of Community Medicine and Public Health*, 5 (10), 4237-4241.
37. Zhang, S., Baams, L., Bongardt, D., & Dubas, J. S. (2018). Intra- and inter-individual differences in adolescent depressive mood: the role of relationships with parents and friends. *Journal Abnormal Child Psychology*, 46 (2), 811–824.
38. Zeinali, S. (2018). An evaluative study of socio impact of digital gaming on youth (Ph.D. Thesis). University of Mysore, Karnataka.