https://www.ijresm.com | ISSN (Online): 2581-5792

# Influence of Parenting Styles on Game Addiction and Aggression

M. S. Gukan<sup>1</sup>, S. Priyadhersini<sup>2\*</sup>

<sup>1</sup>M.Sc. 2<sup>nd</sup> Year, Clinical Psychology, Srinivas University, Mangalore, India <sup>2</sup>Counselling Psychologist and Psychotherapist, Aatmeeya Counselling and Psychotherapy, Mangalore, India

Abstract: Play has always been a part of human history, and the Internet has become a playground that is becoming more and more crowded by gamers. According to research, certain Internet gamers may develop symptoms like mood modulation, tolerance, and salience that are typically linked to drug-related addictions. Although it causes psychological and physical harm, addiction is a physical and psychological disability that prevents a person from becoming overly dependent on a chemical, drug, activity, or substance. In order to understand how these factors, influence the samples, the current study looks at the relationships between game addiction, aggression, and parenting style among college students. It made advantage of correlational design. A total of 170 participants—86 males and 74 females—with ages ranging from 17 to 25 from different Indian ethnic groups were included in the sample. Both liberal and authoritarian parenting approaches have the potential to enhance violence as well as encourage game addiction. Also, it was discovered that authoritarian parenting philosophies and game addiction differed by gender.

Keywords: Game addiction, Aggression, Parenting style.

# 1. Introduction

Gaming addiction refers to "persistent and recurrent use of the Internet to engage in games, often with other players, leading to clinically significant impairment or distress. (Karaoglan Yilmaz, et al., 2022) [1]. Some addictions conjointly involve an inability to prevent partaking in activities, like gambling, gaming, eating, or working. In such circumstances, an individual contains an activity of addiction. (Heng, C. J., & Rabbani, M., 2020) [2]. Adolescent gaming disorder is associated with aggressive tendencies and parenting styles (Kim, J. et al., 2023) [3]. Aggression can be normal and is only an indicator of underlying disease when feelings become excessive, all-consuming and interfere with daily living. Aggression is a behaviour that deliberately causes physical or psychological pain to others (Griffiths, M.,1999) [4]. Many factors can affect aggression, including family factors, such as parents' attitudes and behaviour, domestic violence, mass media, culture, and individual factors (Throuvala et al., 2019) [5]. Parenting styles refer to how we control and support our children and the behavioral and performance standards we expect from them. Parents play a crucial part in regulating their children's free time throughout adolescence in order to prevent internet addiction (Akkurt Nurtan et al., 2022) [6]. There are four types of parenting styles permissive style, authoritative style, authoritarian style. direction. Permissive parents are more likely to prefer to avoid conflict and will often acquiescence to their children at first sign of distress. These parents mostly allow their kids to do what they and offer limited guidance or direction. Authoritative parents are nurturing, supportive and often in tune with their children's needs. They guide their children through open and honest discussions to teach values and reasoning. Kids who have authoritative parents tends to be self- disciplined and can think for themselves. Authoritarian parenting is an extremely parenting style. It places high expectations on children with little responsiveness. Each style takes a different approach to raising children and can be identified by a number of different characteristics (Stavrulaki, E. et al., 2021) [7].

There are a few studies conducted in different cultures reporting an association between Gaming addiction and aggression (Kim, K. J.1998) [8]. However, it is not known if this relationship will be present in game addiction, aggression, and parenting style. It was hypothesized that game addiction would be positively related to aggression and parenting style.

# A. Objectives

- 1. To ascertain the relationship between parenting style and gaming addiction.
- 2. To find the relationship between parenting style and aggression.
- 3. To examine the relationship between gaming addiction and aggression.
- 4. To examine the role of gender in gaming addiction and aggression.

# B. Hypothesis

- H1: There is no relationship between parenting style and gaming addiction.
- H2: There is no relationship between parenting style and aggression.
- H3: There is no relationship between gaming addiction and aggression.
- H4: There is no difference between gaming addiction and aggression basis of gender.

<sup>\*</sup>Corresponding author: priyadhersini071@gmail.com

## 2. Methodology

# A. Sample

Around N=160 samples were collected from various people in India. In the sample, there are 86 males and 74 females have been taken. The age group is from 17 to 25. The samples were collected through using Convenient Sampling Method.

#### B. Assessments Used

- Game Addiction Scale (GAS) (Lin CY et al. 2019).
- Aggression Questionnaire (Samani, S. 2008).
- Parenting style (Divya T. V., and Manikandan, K. 2013)

#### C. Sources

- Game Addiction Scale (GAS) (Lin CY et al. 2019).
- Aggression Questionnaire (Samani, S. 2008).
- Parenting style (Divya T. V., and Manikandan, K. 2013)

These participants were chosen using the Convenient Sampling Technique. Data on three variables were gathered using three scales: the Lemmens et al. (2011) Game Addiction Scale (GAS) questionnaire, the Bussand Perry (1992) Aggression Questionnaire, and the Divya and Manikandan (2013) Parental Style Scale. According to the research, parental style and student variables have a substantial association that influences how aggressive and addicted to video games a person is.

#### 3. Review of Literature

Květon, P., & Jelínek, M. (2016) [9] examined parenting styles and their relation to videogame addiction. The findings found solid relationship between the total score of Gaming Addiction and subjectively reported number of hours spend by playing videogames per day.

Hassan, K., & Fatima, H. (2021) [10] studied association between father parenting styles and game This fact will definitely help parents and psychologists in addressing major reasons behind game addiction. addiction with the mediating effect of aggression among college students". This fact will definitely help parents and psychologists in addressing major reasons behind game addiction.

Emre, O. (2020) [11] examined effect of game addiction on reactive-proactive aggression in adolescents. The study found

that gender has a significant effect on reactive proactive aggression. Aggression levels of male adolescents were significantly higher than females. Aggression levels of adolescents in the 10th grade were found to be higher than those of the adolescents in the other grades.

Griffiths, M. (1999) [12] According to the social learning theory (e.g., Bandura, 1986), children will copy what they see on screen when they play violent video games, which in turn will stimulate aggressive behaviour. Several studies have used self-report to determine the presence of increased hostility. Male students in the fourth through sixth grades who self-reportedly used video games showed a favourable correlation with their teachers' assessments of their impulsiveness and aggression (Lin and Lepper, 1987). In a sample of male students in grades five through eleven, Rushbrook (1986) found a relationship between the amount of time spent playing video games and aggressive attitudes that were more pro-war. In research with teenage boys using questionnaires.

(D Griffiths, M., J Kuss, D., & L King, D. 2012) [13]. Video game addiction: Past, present and future. *Current Psychiatry Reviews*, 8(4), 308-318. The subject of gaming addiction is drawing more attention from researchers. The number of empirical studies exploring different facets of problematic video game play and video game addiction has increased significantly during the past ten years. This essay starts out by providing a brief overview of the developments in the last three decades (the 1980s, 1990s, and 2000s) in the field of video game addiction research.

(Anandari, D.R. 2016, February) [14]. The findings of the study demonstrated that parenting philosophies frequently have an impact on an individual's incapacity to exercise self-control. In this situation, parents typically show their love for their kids by giving them anything they ask for, providing for all of their needs, and never reprimanding or warning them when they misbehave.

# 4. Result

By using a Spearmon Correlation method, Authoritative parenting style is not correlated with Physical aggression. Authoritative parenting style is positively correlated with Verbal aggression at significance level of 0.01 level. Authoritative parenting style is negatively correlated with Anger. Authoritative parenting style is not correlated with Hostility. Authoritative parenting style is not correlated with

Table 1
Spearmen correlation for Gaming addiction, Aggression and Parenting styles dimensions among college students
Spearmen Correlation Test, N=160

	AV	AN	PR	PS total	PA	VA	A	H	AG total	GA total
AV	1	407**	001	.248**	.047	.224**	-0.41	.098	.090	258**
AN		1	.519**	.603**	.256**	.042	.165	.062	.166*	.276**
PR			1	.896**	.394**	.136	.305**	.172*	.345**	.084
PS total				1	.394**	.195*	.252**	.182*	.338**	.033
PA					1	.305**	.435**	.398*8	.782**	.210*
VA						1	.482**	.463**	.638**	.138
A							1	.314**	.738**	.270**
H								1	.701**	014
AG total									1	.169*
GA total									.169*	1

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 2
Mann-Whitney U test gender difference for Gaming addiction, Aggression and Parenting styles among college students

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Authoritative	2191.500	5932.500	-3.508	.000
Authoritarian	2730.500	5580.500	-1.679	.093
Permissive	3112.500	5962.500	382	.703
Parenting Style	3067.500	6808.500	534	.593
Physical aggression	3092.000	6833.000	451	.652
Verbal aggression	2813.000	6554.000	-1.403	.161
Anger	3.186E3	6.928E3	131	.896
Hostility	2.822E3	6.563E3	-1.367	.172
Aggression total	2915.000	6656.000	-1.051	.293
Game addiction	2146.500	4996.500	-3.664	.000

Aggression. Authoritative parenting style is negatively correlated with Game addiction at significance level of 0.01 level. Authoritarian parenting style is positively correlated with Physical aggression. Authoritarian parenting style is not correlated with Verbal aggression. Authoritarian parenting style is positively correlated with Anger at significance level of 0.05 level. Authoritarian parenting style is not correlated with Hostility. Authoritarian parenting style is positively correlated with Aggression at significance level of 0.05 level. Authoritarian parenting style is positively correlated with Game addiction at significance level of 0.01 level. Permissive parenting style is positively correlated with Physical aggression at significance level of 0.01 level. Permissive parenting style is positively correlated with Verbal aggression. Permissive parenting style is positively correlated with Anger at significance level of 0.01 level. Permissive parenting style is positively correlated with Hostility at significance level of 0.05 level. Permissive parenting style is positively correlated with Aggression at significance level of 0.01 level. Permissive parenting style is not correlated with Game addiction. Physical aggression is positively correlated with Game addiction at significance level of 0.05 level. Verbal aggression is positively correlated with Game addiction. Anger is positively correlated with Game addiction at significance level of 0.01 level. Hostility is not correlated with Game addiction. Aggression is positively correlated with Game addiction at significance level of 0.05 level.

People who have authoritative parenting style are high in verbal aggression and game addiction. As authoritative parents have low expectations and demand for their children, this may bring the changes in their children. And if these types of parents are not considering about children's activities, then it will obviously lead to aggression and game addiction. They also have high physical aggression, verbal aggression, anger, and hostility because authoritative parenting style plays a positive role in children's psychological behaviour while authoritarian and permissive parenting styles result in aggressive and negative behaviour in children. Authoritarian parenting styles are high in physical aggression, verbal aggression, anger and hostility because parent-child aggression was also related to dysfunctional parenting styles, particularly an overreactive, authoritarian parenting style. Children from these families have low self-esteem, poor character judgement, and will rebel against authority figures as adults. Authoritarian parenting styles are low in verbal aggression and hostility because authoritarian parenting is extremely strict. Parents expect their children to obey the rules without question or compromise.

Parents that feel that obedience equals love so at this situation for their children's there is no chance to occur aggression. Permissive parenting styles are high in physical aggression, verbal aggression, and anger because permissive parenting involves a lack of demands and expectations, children raised by parents with this style tend to lack a strong sense of selfdiscipline as they grow older. They may be unrulier in school due to the lack of boundaries in the home and may be less academically motivated than many of their peers so these type of poor parenting styles can increase aggression when they engage in games. Game addictions are low in hostility aggression because that many studies shown that when we experience fear, anger, pain, frustration, or sadness, our amygdala lights up. However, fMRI studies have shown that when we play a video game while experiencing similar feelings, the amygdala begins to relax. Aggression is high in game addiction because longitudinal evidence demonstrates that violent video games predict aggression. Violent video gaming is causally linked to aggression, according to experimental data. Meta-analysis indicates that violent video games increase aggressive thoughts, aggressive affect, and aggressive behaviour.

There is a significant difference males and females in Authoritative parenting style and game addiction.

# 5. Discussion

These days, one of the most popular hobbies among teenagers is playing online games because of the widespread usage of high-speed Internet. Determining the benefits and drawbacks of these games is therefore fundamentally important. This study aims to explore the relationship between adolescents' academic accomplishment, academic adjustment, and family emotional environment in relation to online game addiction. Addiction to online gaming may be predicted by the emotional climate of the family as well as the desire and adjustment of adolescents towards education. In order to lessen young people's propensity to play these kinds of games and to recognise the harm that comes from playing these kinds of games excessively, it is advised that these three aspects be taken into account (Esrafili, H., & Basharpoor, S., 2019) [15]. the association between parenting style and preschoolers' aggressive behaviour, as well as their views of intention, rage, and aggressive behaviour. A regression analysis revealed a substantial relationship between the child's impression of intention and the hostile rejection parenting style. Previous studies have demonstrated a connection between aggressive or

angry behaviour and the sense of intention. The study's findings imply that rage or aggressive behaviour and unfriendly parenting may be mediated by perception of purpose (Bardina, P., & Wilson, M. 1997) [16]. In contrast to parents of disobedient children, who were non-controlling, and parents of immature children, who were non nurturant, the parents of the most mature children were communicative, demanding, controlling, and nurturing (Baumrind, D. 1967) [17] Studies reveal that that there is a remarkable prevalence of gaming disorder among the children. Healthy parent-child relationship was shielding against gaming disorder. Non-supervision, nondiscipline, violent correction was positively associated with gaming disorder. (Cuong, V. M., et al., 2021) [18]. Numerous elements, including personality traits and social and family environmental factors, have been studied as risk factors or predictors for internet addiction. In a current, highly regarded systematic study assessing cross-sectional and longitudinal IGD research (Mihara, S., & Higuchi, S. 2017) [19]. Full meditation was seen in the link between the parenting style component of "parents' emotional warmth" for both mothers and fathers and internet gaming problem, indicating the mediating function of adolescents' predisposition towards time management. The findings demonstrate how emotional warmth can boost autonomy, self-efficacy, and self-control by encouraging time management, which is a key protective factor against IGD and can operate as a mediating personality characteristic. Overprotection and parental rejection are also risk factors for addiction that should be carefully evaluated, even though they are not substantial in the full model. (Chen, I. H. et l., 2020) [20]. According to Kernberg, the child's emotional malnourishment and anger stem from the parents' disregard. This hypothesis states that the child's need to take comfort in an aspect of themselves that makes others adore them leads to the narcissistic defense. Thus, seeking validation through various addictive behaviours (Priyadhersini, S., et al. 2022) [21]. The association between moral disengagement and aggressiveness was reduced by the mother's denial of the parental parenting patterns and the father's desire. According to the research, there may be a relationship between frequent exposure to violent video games and increased risk of greater levels of teenage aggressiveness and moral disengagement, anger, hostility, and parental rearing styles (Li, J., et al., 2020) [22]. Findings suggest that teenagers' life happiness is significantly predicted by both harsh-negative and supportivepositive parenting styles, which are mediated by self-control and the usage of maladaptive video games. The proposed model test was performed using PLS-SEM analysis. By identifying strategies for repairing parent-child relationships damaged by the negative consequences of young game use, this study filled a research vacuum. (Jeon, H. G., et al., 2021) [23]. A logistic regression model revealed that a dominant permissive style of parents was substantially related to symptoms of Internet Gaming Addiction in their children. Findings highlight a strong correlation between parenting styles and symptoms of Internet Gaming Addiction, emphasizing the importance of parental involvement in both the prevention and development of Internet Gaming Addiction in early adolescence. (Maftei, A., & Enea,

2020) [24]. The four facets of parenting styles—inconsistency, involvement, control, and warmth—as well as another variation are added to the study, which reveals that the respondent's gender was a significant predictor. Males scored higher on the game addiction scale, indicating a higher level of addiction in younger children, and parental inconsistency—the more inconsistent the upbringing, the more advanced the addiction to gaming. (Květon, P., & Jelínek, M., 2016) [25]. While authoritarian and permissive parenting styles cause children to behave negatively and aggressively, authoritative parenting methods have a favourable impact on children's psychological development. Additionally, the current study indicates that there is potential for research on this subject in poorer nations. Future studies should be conducted in emerging and underdeveloped nations, with an emphasis on mixed research methods, and look at the direct relationship between parenting styles and violent behaviour in kids within various cultural contexts. (Masud, H., et al., 2019) [26] [27]. The findings showed that hostility is significantly predicted by perceived and permissive parenting along authoritative acculturation. Aggression is also highly predicted by parenting styles that are perceived as permissive or authoritarian (Medrano, M. R. 2015) [27], [28]. Parenting practices and aggressive inclinations are linked to adolescent gaming disorder. The results indicate that in addition to controlling parents' level of control, gaming disorder interventions should also track the interactions between gaming disorder and aggression in teenagers. (Kim, J., et al., 2023) [29]. Research findings also say that Positive correlations were found between Internet addiction and neuroticism, parental rejection, and overprotectiveness. Extroversion, agreeableness, conscientiousness, openness to new things, and emotional warmth from parents were found to be inversely correlated with Internet addiction (Shivam, S., et al., 2021) [30]. The authoritative and authoritarian parenting philosophies appeared to be effective in regulating children's gaming habits. However, it didn't look like an authoritarian parenting approach was effective in regulating children's psychosocial growth. (Uyun, M., et al., 2021) [31]. Understanding the direct and underlying relationships between parenting style and depression symptoms can help prevent and treat teenage depression symptoms as well as problematic online game use (Gan, X., et al., 2021) [32]. The video game addiction questionnaire's questions were found to have significant relationships with resilience and coping mechanisms. Specifically, a negative correlation was found with avoidance tactics, while a positive correlation was found with adaptive methods and positive resources (Emre, O., 2020) [11].

#### 6. Conclusion

This study is on game addiction, aggression, and parenting style. These concepts have been the subject of considerable research, debate, and discussion among experts in several disciplines and has generated controversy within the medical, scientific, psychological, and gaming communities. It could be concluded that by this research finding there is a significant relationship between the variables such as parenting styles,

gaming addiction, aggression and among the students by remarkable significance with respect to gender. Thus, it can be concluded that the parenting style does affect the individual's game addiction and aggression. Authoritarian type of parenting style may cause game addiction and lead to aggressive behaviour, also permissive parenting may lead to increase in aggression. But authoritative parenting style which we can consider as the best parenting style because it helps to reduce or control the game addiction and aggression.

## References

- [1] Karaoglan Yilmaz, F. G., Avci, U., & Yilmaz, R. (2022). The role of loneliness and aggression on smartphone addiction among university students. *Current psychology*, 1-9.
- [2] Heng, C. J., & Rabbani, M. (2020). The Relationship between Gaming Addiction, Aggressive Behaviour and Narcissistic Personality Traits among University Students in Malaysia. *Indian Journal of Public Health Research & Development*, 11(5).
- [3] Kim, J., Lee, D., Lee, S., Kim, E., & Oh, S. (2023). Reinforcing relationships between gaming disorder and aggression and intrusive parenting across 4 years. Cyberpsychology, Behavior, and Social Networking, 26(2), 106-113.
- [4] Griffiths, M. (1999). Violent video games and aggression: A review of the literature. Aggression and violent behavior, 4(2), 203-212.
- [5] Throuvala, M. A., Griffiths, M. D., Rennoldson, M., & Kuss, D. J. (2019). School-based prevention for adolescent internet addiction: Prevention is the key. A systematic literature review. *Current neuropharmacology*, 17(6), 507-525.
- [6] Akkurt Nurtan, K., Evgin, D., & Gördeleş Beser, N. (2022). The relationship between internet addiction, cyberbullying and parental attitudes.
- [7] Stavrulaki, E., Li, M., & Gupta, J. (2021). Perceived parenting styles, academic achievement, and life satisfaction of college students: the mediating role of motivation orientation. *European Journal of Psychology of Education*, 36, 693-717.
- [8] Kim, K. J. (1998). The effects of harsh parenting and aggressive behavior on adolescents' externalizing problem behavior. Iowa State University.
- [9] Květon, P., & Jelínek, M. (2016). Parenting styles and their relation to videogame addiction. *International Journal of Psychological and Behavioral Sciences*, 10(6), 1961-1964.
- [10] Hassan, K., & Fatima, H. (2021). Association between father parenting styles and game addiction with the mediating effect of aggression among college students. *International Journal of Behavioral Sciences*, 15(2), 96-100.
- [11] Emre, O. (2020). Effect of game addiction on reactive-proactive aggression in adolescents.
- [12] Griffiths, M. (1999). Violent video games and aggression: A review of the literature. *Aggression and violent behavior*, 4(2), 203-212.
- [13] D. Griffiths, M., J Kuss, D., & L King, D. (2012). Video game addiction: Past, present and future. *Current Psychiatry Reviews*, 8(4), 308-318.
- [14] Anandari, D. R. (2016, February). Permissive parenting style and its risks to trigger online game addiction among children. In *Asian Conference 2nd Psychology & Humanity* (pp. 773-781).
- [15] Esrafili, H., & Basharpoor, S. (2019). The correlation of addiction to online games with family emotional climate, academic longing, and

- academic adjustment in students. *Journal of Research in Rehabilitation Sciences*, 15(4), 204-210.
- [16] Bardina, P., & Wilson, M. (1997). The relationship between parenting style and children's anger, aggressive behavior, and perception of intention. *Modern Psychological Studies*, 5(1), 5.
- [17] Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. Genetic psychology monographs.
- [18] Cuong, V. M., Assanangkornchai, S., Wichaidit, W., Minh Hanh, V. T., & My Hanh, H. T. (2021). Associations between gaming disorder, parentchild relationship, parental supervision, and discipline styles: Findings from a school-based survey during the COVID-19 pandemic in Vietnam. *Journal of behavioral addictions*, 10(3), 722-730.
- [19] Mihara, S., & Higuchi, S. (2017). Cross-sectional and longitudinal epidemiological studies of I nternet gaming disorder: A systematic review of the literature. *Psychiatry and clinical neurosciences*, 71(7), 425-444.
- [20] Chen, I. H., Lee, Z. H., Dong, X. Y., Gamble, J. H., & Feng, H. W. (2020). The influence of parenting style and time management tendency on internet gaming disorder among adolescents. *International Journal of Environmental Research and Public Health*, 17(23), 9120.
- [21] Priyadhersini, S., Kotian, M. S., & Sambasivan, S. (2022). Narcissism and Self-Esteem as a Perspective to Substance Use in Young Adults. *International Journal of Modern Developments in Engineering* and Science, 1(12), 49-57.
- [22] Li, J., Du, Q., & Gao, X. (2020). Adolescent aggression and violent video games: The role of moral disengagement and parental rearing patterns. *Children and Youth Services Review*, 118, 105370.
- [23] Jeon, H. G., Lee, S. J., Kim, J. A., Kim, G. M., & Jeong, E. J. (2021). Exploring the influence of parenting style on adolescents' maladaptive game use through aggression and self-control. *Sustainability*, 13(8), 4589.
- [24] Maftei, A., & Enea, V. (2020). Symptoms of Internet Gaming Disorder and parenting styles in Romanian adolescents. *Psihologija*, 53(3), 307-318
- [25] Květon, P., & Jelínek, M. (2016). Parenting styles and their relation to videogame addiction. *International Journal of Psychological and Behavioral Sciences*, 10(6), 1961-1964.
- [26] Masud, H., Ahmad, M. S., Cho, K. W., & Fakhr, Z. (2019). Parenting styles and aggression among young adolescents: a systematic review of literature. *Community mental health journal*, 55, 1015-1030.
- [27] Medrano, M. R. (2015). The Association Between Perceived Parenting Styles and Aggression in Mexican American Young Adults.
- [28] Orpinas, P., Murray, N., & Kelder, S. (1999). Parental influences on students' aggressive behaviors and weapon carrying. *Health Education & Behavior*, 26(6), 774-787.
- [29] Kim, J., Lee, D., Lee, S., Kim, E., & Oh, S. (2023). Reinforcing relationships between gaming disorder and aggression and intrusive parenting across 4 years. Cyberpsychology, Behavior, and Social Networking, 26(2), 106-113.
- [30] Shivam, S., Chaudhari, B., Chaudhury, S., & Saldanha, D. (2021). Parenting style and personality correlates of internet addiction: A cross-sectional study. *Medical Journal of Dr. DY Patil University*, 14(2), 143-154.
- [31] Uyun, M., Daheri, M., Nashori, F., Warsah, I., & Morganna, R. (2021).
  Parenting Styles in Dealing with Children's Online Gaming Routines. Ilkogretim Online, 20(2).
- [32] Gan, X., Li, H., Li, M., Yu, C., Jin, X., Zhu, C., & Liu, Y. (2021). Parenting styles, depressive symptoms, and problematic online game use in adolescents: a developmental cascades model. *Frontiers in Public Health*, 9, 710667.