



Impact of Online Games on Children's Mental Health

Kevin Guerada

Ateneo de Manila University, Philippines

Corresponding Author: Kevin Guerada



Article Info

Article history:

Received 26 December 2020

Received in revised form 12

January 2021

Accepted 17 January 2021

Keywords:

Mental Health

Online Games

Children

Abstract

This article examines the impact of online games on children's mental health. A person can be diagnosed with a game addiction by a psychologist or a psychiatrist if he has a game playing pattern that is severe enough to have a negative impact on himself, his family, social, education, work, and other important things. Psychologists or psychiatrists usually can only provide a diagnosis after a person's game addiction pattern lasts for at least 12 months, although this time requirement can be shortened if the adverse effects of playing games on his daily life are very obvious. The impact of online gaming addiction on children is manifested through a lack of focus on other daily activities, lack of attention in class, and constant thinking about games. In fact, the World Health Organization (WHO) has designated online game addiction as a type of mental disorder. Game addiction can also occur with other mental disorders, such as stress, depression and anxiety disorders. Various efforts can be made to prevent mental disorders, namely doing physical activity and staying physically active, helping others sincerely to maintain positive thoughts.

Introduction

Mental health is affected by events in life that leave a large impact on a person's personality and behavior. These events can include domestic violence, child abuse, or long-term stress. If mental health is disturbed, mental disorders or mental illness will arise (Wheaton & Clarke, 2003; Hourani, 2012). Mental distress can change how a person handles stress, relate to others, make choices, and trigger a desire to self-harm. Some common types of mental disorders include depression, bipolar disorder, anxiety, post-traumatic stress disorder, obsessive compulsive disorder, and psychosis (Jorm, 2000; Lovallo, 2015).

Some mental illnesses only occur in certain types of sufferers, such as postpartum depression only affects mothers after giving birth (Robertson et al., 2004). Mental disorders or mental illness can be preceded by the following symptoms, including: Yelling or fighting with family and friends, Delusions, paranoia, or hallucinations, Loss of ability to concentrate, Fear, worry, or guilt that always haunts, Inability To cope with daily stress or problems, Excessive anger and prone to violence, Having bad experiences and memories that cannot be forgotten, Having thoughts of hurting yourself or others, Withdrawing yourself from people and daily activities and Hearing voices or believe something that is not true.

Children's Mental Health

Assessing children's health is not only seen from their physical health condition, but also from the child's growth and development according to their age. With a healthy mentality, children will develop and grow well. This will also affect the development of children's behavior into

adulthood (Eisenhower et al., 2009). There are many things that can affect a child's mental health condition. Health factors, genetic history, use of drugs for a long duration, problems during pregnancy, and even the environment, such as family or playgrounds can cause mental disorders. In general, mental disorders can be divided into 5 categories.

Behavioral Problems

Behavioral problems are divided into several types of mental disorders, as follows. ADHD (attention deficit hyperactivity disorder), an attention deficit disorder. Children behave impulsively and hyperactively (Sagvolden et al., 2005; Miller et al., 2010). Conduct disorder or delinquency in children and adolescents. Launching from WebMD, conduct disorder is a serious emotional behavior disorder in children and adolescents. Children with this disorder can display disturbing behavior patterns, have elements of violence, and have problems following rules (Maughan & Cicchetti, 2002).

ODD (oppositional-deviant disorder) or behavior disorder against and defiance. This behavior disorder is characterized by a mood that is irritable, irritable, often argumentative, and vindictive (Miller, 2013; Cavanagh et al., 2017). Drug abuse (drugs, psychotropic substances and other addictive substances). According to Anne, smoking is also included in this disorder. Not only conventional cigarettes, but also vape.

Social-Emotional Disorders

Social-emotional disorders are divided into several types, including: Mood disorders (mood). Quoting from the Bipolar Care Indonesia page, mood disorders refer to the main symptom of changes in feelings. Commonly known are depression (sadness, gloom, hopelessness) and mania (feeling of excessive pleasure). Anxiety disorders (anxiety disorder). Children can also experience anxiety. However, circulating the NHS website, for some children, anxiety can influence behavior and thinking, thus quite impairing their performance at school, home life, and their social life (McDonald, 2001; Russell et al., 2005). Withdrawal and alienation. Children tend to withdraw, for example because they cannot adapt to the demands of their social environment. Stress due to / related to trauma. Anne said that disasters and terrorism in Indonesia have also become stressors resulting in a high stress rate for children.

Parent-Child-Family Relationship Disorders

The relationship between children and parents and other family members helps shape the child's resilience to the challenges or problems they face. Learning development disorders are divided into several types, such as the following: Autistic spectrum disorder (ASD). It is so called because this term covers various problems related to children's brain and neurological development (Win & Potter, 2002; Volkmar et al., 2009). The variations include autism, Asperger's syndrome and Heller syndrome. Childhood schizophrenia. Schizophrenia causes hallucinations, speech problems, delusions, feelings of flatness and dissonance, and loss of will. Intellectual disabilities. A disorder that causes children to be slow in learning new things because their intelligence abilities are below average for their age. Specific learning disorders, which are usually associated with neurological factors (Lyon et al., 2001; Lynch et al., 2002). Disorders of eating behavior and health behavior. This disorder can be characterized by a child suddenly refusing to eat. This can lead to stunting in children.

Different Types of Mental Health Disorders

Pervasive Developmental Disorders, this disorder is a real disorder seen in various areas of development. This disorder can be seen from the type of autism disorder and Asperger's disorder. Autism Spectrum Disorder is a mental disorder in children due to brain disorders that have an impact on communication skills and social interactions (Wong & Hui, 2008; Daniel et al., 2008). Usually, children who suffer from Autism Spectrum Disorder will appear to live

with their own world and imagination. They are unable to connect emotionally with the environment around them;

Mental retardation disorder, a widespread delay in the development of cognition and social functioning of children. This disorder can be diagnosed based on a low IQ score and poor adaptive function (Whaley, 2001). All this can occur due to chromosomal abnormalities, genetic factors, fetal infection or drug abuse in pregnant women or cultural-family causes. Learning disorders, deficiency disorders in specific learning abilities in the context of at least average intelligence and learning opportunities. This disorder is usually found in math disorders, writing disorders or reading disorders (dyslexia).

Communication disorders, this disorder can be seen in expressive language disorder, mixed language disorder receptive & expressive, phonological and stuttering disorders, attention deficit disorder and problem behavior is a disorder of problematic behavior patterns that generally interfere with other people or adaptive social functions. This disorder can be characterized in ADHD (Attention Deficit Hyperactivity Disorder), CD (Conduct Disorder), and ODD (Oppositional Defiant Disorder) (Matthys et al., 1998; Coolidge et al., 2000).

Anxiety and depression, this disorder is prominently seen in separation anxiety disorder, specific phobia, social phobia, generalized anxiety disorder, major depression and bipolar disorder. Bipolar disorder is a mental illness associated with brain abnormalities (Johnston-Wilson et al., 2000; Strakowski et al., 2000). This can cause mood swings and unusual shifts in the level of energy and activity that the child is doing. Children with bipolar disorder may experience episodes of mania or episodes of depression. When a child has a manic episode, the child will appear to have a lot of energy and will be more active than usual. Then there are depressive episodes that will make the child seem always discouraged and make the child feel very depressed at whatever is being done. Bipolar disorder in children cannot be cured, but mothers can help children learn to manage their mood changes properly. Central Auditory Processing Disorder (CAPD) or also known as Auditory Process Disorder is a hearing problem that occurs when the brain is not working optimally (Willeford & Burleigh, 1985; Chermak & Musiek, 2003). Usually, children who experience CAPD will have difficulty responding to sounds, enjoying music, understanding conversations, reading and spelling.

The Dangers of Online Game Addiction

According to the ICD-11, game addiction is a pattern of gaming behavior (online and offline, digital games and video games) with the following signs: Unable to control the desire to play games. Prioritizing playing games more than interest in other activities. One continues to play the game despite the obvious negative consequences. A person can be diagnosed with a game addiction by a psychologist or a psychiatrist if he has a game playing pattern that is severe enough to have a negative impact on himself, his family, social, education, work, and other important things. Psychologists or psychiatrists usually can only provide a diagnosis after a person's game addiction pattern lasts a long time, although this time requirement can be shortened if the adverse effects of playing games on his daily life are very obvious (Lemmens et al., 2009). In another article I explained that many things are considered normal, but fall into the category of mental disorders. When using the ICD-11 classification, there are things that are considered normal that fall into the 6C48 mental disorder category, such as disorders due to caffeine use.

Impact of Online Games on Children's Mental Health

Addiction One of the major health problems found in children and adolescents who play too much online video games is addiction. Many clinical trials have shown that the obsession with spending too much time playing online games is the same as alcohol or drug abuse. The effects of this addiction are manifested through a lack of focus on other daily activities, inattention in

class, and constant thinking about games. In fact, the World Health Organization (WHO) has defined online game addiction as a type of mental disorder (World Health Organization, 2005; Király & Demetrovics, 2017). Game addiction can also occur alongside other mental disorders, such as stress, depression and anxiety disorders. Vision problems Too much playing online games can also increase the risk of health problems in the eye organs, especially decreased vision.

The human eye does not have adequate protection from exposure to blue light, both from sunlight and electronic equipment. Research has shown that blue light has long been identified as the most harmful rays to the retina (Leung & Kee, 2017; Zhao et al., 2018). After penetrating the outside of the eye, blue light reaches the deepest part of the eye, the retina, and can have long-term effects in the form of damage to the retina. In addition, excessive exposure to blue light can also lead to an increased risk of macular degeneration, glaucoma, and degenerative retinal disease that can lead to blindness.

Obesity Too much game play makes us lazy to move. The reason is, only the eyes and hands are focused on working while playing games. While the rest of the body remains motionless. If this is done continuously, it will certainly have an effect on obesity. Game addicts also often have a bad diet. Of course, this will cause various health problems.

Quervain's Syndrome is a disorder caused by inflammation of the tendons. As a result, the thumb and wrist hurt. This syndrome is caused by activities that focus on repetitive hand movements, one of which is playing games (Bar et al., 2004; Griffiths, 2008). The pain usually occurs when you hold or pinch something. The pain can get worse when we try to move the thumb or turn the wrist. In some cases, the pain can radiate down the arm.

The impact of someone who is addicted to video or internet-based games (online games) is enormous. Someone who experiences online game addiction will experience physical complaints in terms of health. Often someone who is addicted to online games experiences sleep disorders that affect his body's metabolic system, often feels tired or fatigue syndrome, stiff neck and muscles, to Carpal Turner Syndrome.

In addition, the tendency of sedentary life and prioritizing playing games over other main activities, such as eating, makes online game addicts dehydrated, thin or even otherwise overweight and at risk of suffering from non-communicable diseases such as heart disease. In certain cases, online gambling addiction is also quite large.

It should be noted that WHO has defined online game addiction or game disorder in the latest version of the International Statistical Classification of Diseases (ICD) as a mental disorder (Hasin et al., 2006; Roth et al., 2011). In the latest version of ICD-11, WHO states that game addiction is a disorder due to addictive behavior or a disorder caused by habit or addiction.

Mental Health Prevention and Treatment

Various efforts can be made to prevent mental disorders, namely doing physical activity and staying physically active, helping others sincerely to maintain positive thoughts. have the ability to solve problems, seek professional help if needed, maintain good relationships with others, maintain adequate sleep and rest. Some of the treatment options that doctors will take in treating mental disorders include: (1) Psychotherapy is a speech therapy that provides a safe medium for sufferers to express feelings and ask for advice. Psychiatrists will provide assistance by guiding the sufferer in controlling feelings. Psychotherapy along with treatment using drugs are the most effective way to treat mental illness. Some examples of psychotherapy include cognitive behavioral therapy, exposure therapy, dialectical behavior therapy, and so on (Leichsenring et al., 2006). (2) Medicines. The administration of drugs to treat mental illness generally aims to change brain chemicals in the brain. These drugs are in the form of selective serotonin reuptake inhibitors (SSRIs), serotonin-norepinephrine reuptake inhibitors (SNRIs),

and tricyclic antidepressants. These medications are generally combined with psychotherapy for more effective treatment results. (3) Hospitalization. Hospitalization is required if the sufferer requires close monitoring of symptoms or there is a psychiatric emergency, such as a suicide attempt. (4) Support group. Support groups generally consist of people with similar mental illnesses or who can control their emotions well. They come together to share experiences and guide one another towards recovery. (5) Brain stimulation. Brain stimulation takes the form of electroconvulsive therapy, transcranial magnetic stimulation, experimental treatment called deep brain stimulation, and vagus nerve stimulation. (6) Treatment of substance abuse. This treatment is performed on people with mental illness caused by addiction due to substance abuse. (7) Make plans for yourself, for example adjusting your lifestyle and daily habits, to fight mental illness. This plan aims to monitor health, aid in the recovery process, and identify triggers or warning signs of illness.

Conclusion

WHO has defined online game addiction or game disorder in the latest version of the International Statistical Classification of Diseases (ICD) as a mental disorder. Online game addiction for children is one of the major health problems found in children and adolescents who play too much online video games is addiction. Many clinical trials have shown that the obsession with spending too much time playing online games is the same as alcohol or drug abuse. addiction to online games can also appear along with other mental disorders, such as stress, depression, and anxiety disorders. Physical activity and stay physically active, help others sincerely maintain positive thoughts. Having the ability to solve problems, seek professional help if needed, maintain good relationships with others, maintain adequate sleep and rest are all ways to reduce online gaming addiction in children.

References

- Cavanagh, M., Quinn, D., Duncan, D., Graham, T., & Balbuena, L. (2017). Oppositional defiant disorder is better conceptualized as a disorder of emotional regulation. *Journal of attention disorders*, 21(5), 381-389.
- Chermak, G. D., & Musiek, F. E. (2013). *Handbook of central auditory processing disorder, volume II: Comprehensive intervention* (Vol. 2). Plural Publishing.
- Coolidge, F. L., Thede, L. L., & Young, S. E. (2000). Heritability and the comorbidity of attention deficit hyperactivity disorder with behavioral disorders and executive function deficits: A preliminary investigation. *Developmental neuropsychology*, 17(3), 273-287.
- Eisenhower, A. S., Baker, B. L., & Blacher, J. (2009). Children's delayed development and behavior problems: Impact on mothers' perceived physical health across early childhood. *Social Science & Medicine*, 68(1), 89-99.
- Griffiths, M. (2008). Internet and video-game addiction. In *Adolescent addiction* (pp. 231-267). Academic Press.
- Hasin, D., Hatzenbuehler, M. L., Keyes, K., & Ogburn, E. (2006). Substance use disorders: diagnostic and statistical manual of mental disorders, (DSM-IV) and International Classification of Diseases, (ICD-10). *Addiction*, 101, 59-75.
- Hourani, L., Bender, R. H., Weimer, B., Peeler, R., Bradshaw, M., Lane, M., & Larson, G. (2012). Longitudinal study of resilience and mental health in marines leaving military service. *Journal of affective disorders*, 139(2), 154-165.
- Johnston-Wilson, N. L., Sims, C. D., Hofmann, J. P., Anderson, L., Shore, A. D., Torrey, E. F., & Yolken, R. H. (2000). Disease-specific alterations in frontal cortex brain proteins

- in schizophrenia, bipolar disorder, and major depressive disorder. *Molecular psychiatry*, 5(2), 142-149.
- Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *The British Journal of Psychiatry*, 177(5), 396-401.
- Király, O., & Demetrovics, Z. (2017). Inclusion of Gaming Disorder in ICD has more advantages than disadvantages: Commentary on: Scholars' open debate paper on the World Health Organization ICD-11 Gaming Disorder proposal (Aarseth et al.). *Journal of Behavioral Addictions*, 6(3), 280-284.
- Leichsenring, F., Hiller, W., Weissberg, M., & Leibing, E. (2006). Cognitive-behavioral therapy and psychodynamic psychotherapy: techniques, efficacy, and indications. *American journal of psychotherapy*, 60(3), 233-259.
- Lemmens, J. S., Valkenburg, P. M., & Peter, J. (2009). Development and validation of a game addiction scale for adolescents. *Media psychology*, 12(1), 77-95.
- Leung, T. W., Li, R. W. H., & Kee, C. S. (2017). Blue-light filtering spectacle lenses: optical and clinical performances. *PloS one*, 12(1), e0169114.
- Lovullo, W. R. (2015). *Stress and health: Biological and psychological interactions*. Sage publications.
- Lynch, J. K., Hirtz, D. G., DeVeber, G., & Nelson, K. B. (2002). Report of the National Institute of Neurological Disorders and Stroke workshop on perinatal and childhood stroke. *Pediatrics*, 109(1), 116-123.
- Lyon, G. R., Fletcher, J. M., Shaywitz, S. E., Shaywitz, B. A., Torgesen, J. K., Wood, F. B., ... & Olson, R. (2001). Rethinking learning disabilities. *Rethinking special education for a new century*, 259-287.
- Matthys, W., Goozen, S. H. V., Vries, H. D., Cohen-Kettenis, P. T., & Engeland, H. V. (1998). The dominance of behavioural activation over behavioural inhibition in conduct disordered boys with or without attention deficit hyperactivity disorder. *Journal of Child Psychology and Psychiatry*, 39(5), 643-651.
- Maughan, A., & Cicchetti, D. (2002). Impact of child maltreatment and interadult violence on children's emotion regulation abilities and socioemotional adjustment. *Child development*, 73(5), 1525-1542.
- McDonald, A. S. (2001). The prevalence and effects of test anxiety in school children. *Educational psychology*, 21(1), 89-101.
- Miller, D. J., Derefinko, K. J., Lynam, D. R., Milich, R., & Fillmore, M. T. (2010). Impulsivity and attention deficit-hyperactivity disorder: subtype classification using the UPPS impulsive behavior scale. *Journal of psychopathology and behavioral assessment*, 32(3), 323-332.
- Miller, N. A. (2013). *The latent structure of oppositional defiant disorder and conduct disorder*. Western Carolina University.
- Robertson, E., Grace, S., Wallington, T., & Stewart, D. E. (2004). Antenatal risk factors for postpartum depression: a synthesis of recent literature. *General hospital psychiatry*, 26(4), 289-295.
- Roth, T., Coulouvrat, C., Hajak, G., Lakoma, M. D., Sampson, N. A., Shahly, V., ... & Kessler, R. C. (2011). Prevalence and perceived health associated with insomnia based on DSM-IV-TR; international statistical classification of diseases and related health problems, tenth revision; and research diagnostic criteria/international classification

- of sleep disorders, criteria: results from the America insomnia survey. *Biological psychiatry*, 69(6), 592-600.
- Russell, E., Sofronoff, K., Russell, E., & Sofronoff, K. (2005). Anxiety and social worries in children with Asperger syndrome. *Australian & New Zealand Journal of Psychiatry*, 39(7), 633-638.
- Sagvolden, T., Johansen, E. B., Aase, H., & Russell, V. A. (2005). A dynamic developmental theory of attention-deficit/hyperactivity disorder (ADHD) predominantly hyperactive/impulsive and combined subtypes. *Behavioral and Brain Sciences*, 28(3), 397-418.
- Strakowski, S. M., DelBello, M. P., Adler, C., Cecil, K. M., & Sax, K. W. (2000). Neuroimaging in bipolar disorder. *Bipolar disorders*, 2(3), 148-164.
- Volkmar, F. R., State, M., & Klin, A. (2009). Autism and autism spectrum disorders: diagnostic issues for the coming decade. *Journal of Child Psychology and Psychiatry*, 50(1-2), 108-115.
- Whaley, S. E., O'Connor, M. J., & Gunderson, B. (2001). Comparison of the adaptive functioning of children prenatally exposed to alcohol to a nonexposed clinical sample. *Alcoholism: Clinical and Experimental Research*, 25(7), 1018-1024.
- Wheaton, B., & Clarke, P. (2003). Space meets time: Integrating temporal and contextual influences on mental health in early adulthood. *American Sociological Review*, 680-706.
- Willeford, J. A., & Burleigh, J. M. (1985). *Handbook of central auditory processing disorders in children* (pp. 61-86). Orlando, FL: Grune & Stratton.
- Wing, L., & Potter, D. (2002). The epidemiology of autistic spectrum disorders: is the prevalence rising?. *Mental retardation and developmental disabilities research reviews*, 8(3), 151-161.
- Wong, V. C., & Hui, S. L. (2008). Epidemiological study of autism spectrum disorder in China. *Journal of Child Neurology*, 23(1), 67-72.
- World Health Organization. (2005). *Promoting mental health: concepts, emerging evidence, practice: a report of the World Health Organization, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne*. World Health Organization.
- Zhao, Z. C., Zhou, Y., Tan, G., & Li, J. (2018). Research progress about the effect and prevention of blue light on eyes. *International Journal of Ophthalmology*, 11(12), 1999.