

Impact of Gaming Disorder Against Adolescent Emotional Intelligence: A Systematic Review

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Abstract

Emotional intelligence consists of self-awareness, self-regulation, self-motivation, self-empathy and social skills. Gaming disorder in adolescents can lead to self-concept disorder, depression, social dysfunction and even mental disorders. The systematic aim of this review is to identify the phenomenology of the impact of gaming disorder on adolescent emotional intelligence. The stages in making this systematic review create questions, identification, eligibility, article inclusion selection, screening, and appraisal in an international database that is Science Direct, ProQuest and PubMed. Selection was done with PRISMA flow-diagrams and criticized with the JBI tool. After obtaining 23 relevant articles, they are then analyzed into a systematic review. Gaming disorder is a problem of great concern in various countries. Gaming disorder is the main trigger affecting the emotional intelligence of adolescents today. The highest aspect resulting from gaming disorder is in the aspect of self-regulation, then aspects of self-awareness, self-empathy, self-motivation and social skills also experience a significant impact. This disorder, if it continues with higher intensity, can cause sufferers to experience negative things in their lives. Emotional intelligence is very important to be mastered in life, if emotional intelligence has been disturbed due to gaming disorder then the five aspects of emotional intelligence will also be disturbed. The fact that gaming disorder is empirically proven can have an impact on adolescent emotional intelligence. Thus, conducting additional research in Indonesia and also the world is very important to understand gaming disorder and how to handle it.

Keywords: Gaming Disorder, Internet Gaming Disorder, ICD-11, Emotional Intelligence, Gaming Behavior Adolescen.



A. INTRODUCTION

Rapid technological developments, especially in entertainment (games) can make teens addicted to playing games (Kurt et al., 2018; Paik et al., 2017; Wartberg, Zieglmeier, & Kammerl, 2019). Gaming disorder is a pattern of negative behavior characterized by loss of control over a game (Saunders, 2017; Paik et al., 2017). The fifth edition of the American Psychiatric Association (APA) Diagnostic and Statistics Manual of Mental Disorders (DSM-5) has classified gaming disorder as a subset of non-substance-related disorders in the category of substance-related and addictive disorders (APA, 2013).

Diagnostic criteria for gaming disorder are: (a) preoccupation with the game, (b) withdrawal symptoms when the game is stopped, (c) increased tolerance for the need to spend more time involved in the game, (d) failed attempts to control participation in the game, (e) losing interest in hobbies and other entertainment as a result of the game, (f) continuing to use Internet games excessively despite being

aware of psychosocial problems, (g) deceiving family members, therapists, or others regarding the amount of game use, (h) using games to escape or eliminate negative moods and (i) losing significant relationships, jobs, or educational opportunities due to participating in games (APA, 2013; Wang et al., 2019; Milani et al., 2017; Kurt et al., 2018).

According to a recent epidemiological survey study gaming disorders experienced by adolescents can have physical, psychological and social impacts. Physical impacts include amblyopia on the eyes, and tendon injuries (Ayenigbara, 2018; Meng et al., 2015; Dong et al., 2017; Weinstein & Lejoyeux, 2015; Marino & Spada, 2017). Psychological effects result in decreased self-concept, depression, attention deficit hyperactivity disorder (ADHD), obsessive compulsive disorder (Chi, Lin, & Zhang, 2016; Andreassen et al., 2016; Lemenager et al., 2018; Liau et al., 2015; Hawi, Samaha & Griffiths, 2018; Satghare et al., 2016). The social impact of game addiction results in loss of learning time, family function, relationships with peers, difficulty expressing oneself and work (John B. Saunders, 2017; Mei et al., 2016; Wu et al., 2016; Gentile et al., 2017; Chi, Lin, & Zhang, 2016; Samek, Hicks, Keyes et al., 2015). This shows that adolescents who are addicted to the game will experience problems of visual function, musculoskeletal, self-concept, impaired concentration and relationships between people.

Despite its serious impact on life, gaming disorder is still only a candidate for psychiatric diagnosis. The number of studies on gaming disorder treatment is quite limited in the literature, and effective and specific treatment protocols for this disorder have not yet been developed. To our knowledge, there is no comprehensive or empirical research in Indonesia on this topic. Thus, this study aims to systematically review studies published today that identify the impact of gaming disorder on adolescent emotional intelligence.

B. METHOD

The systematic review was carried out through several stages, namely making research questions according to PICO rules. Furthermore, collecting data for this literature review using diagrams includes: identification, screening, eligibility selection, and determination of inclusion criteria. In the final stage, a review is carried out by synthesizing the literature to obtain a systematic review.

1. Research Questions

The research question in this review is, "What is the Impact of Gaming Disorder on Adolescent Emotional Intelligence?"

2. Identification of Relevant Journals from Title / Abstract

Article identification is done by searching journal articles in three databases. The database used by the author is Science Direct, ProQuest and PubMed. Then before conducting a search, the authors choose the settings on each database search page, namely: articles published between 2015-2019, the type of reference is the

original international article. After completing the search settings then search for articles using keywords. The keywords used by the authors in this systematic review are 5 in each database, namely Gaming disorder, Internet gaming disorder, ICD-11, Emotional intelligence and Gaming behavior adolescent. The reference chosen for synthesis must meet the inclusion criteria, namely researching Gaming disorder.

3. Screening and Eligibility

In the search there were 27,513 article titles in science direct, 25,005 article titles in proquest and 2,187 titles in pubmed. The list of articles relevant to the research question was successfully identified. After screening through abstracts obtained 70 articles relevant to gaming disorder and adolescent emotional intelligence. The selection is continued by selecting journal articles that are relevant to the researcher's objectives, are eligible and have similar study design. In this final stage, there were 23 journal articles that met the criteria of the researchers' questions.

4. Document Selection and Selection

The selection of articles that have been included is a selection process based on existing inclusion and exclusion criteria. Inclusion and exclusion criteria have been determined by the author. Inclusion criteria include: there is an explanation of gaming behavior in adolescents, the impact that occurs from gaming disorder and adolescent emotional intelligence, the realm or scope of the article is community mental nursing, the assessment is getting stronger if the impact of gaming disorder can affect aspects of adolescent emotional intelligence , and articles use only English. In the exclusion criteria, namely the article's focus on the impact of addiction to gaming/gaming disorder, the method of the article is a systematic review and related article, cannot be read and cannot be edited. At this stage, the article needs to be read as a whole or full text. The results at the adjustment stage based on inclusion and exclusion criteria were 9 articles in the science direct database, 6 articles in the proquest database and 8 articles in the pubmed database.

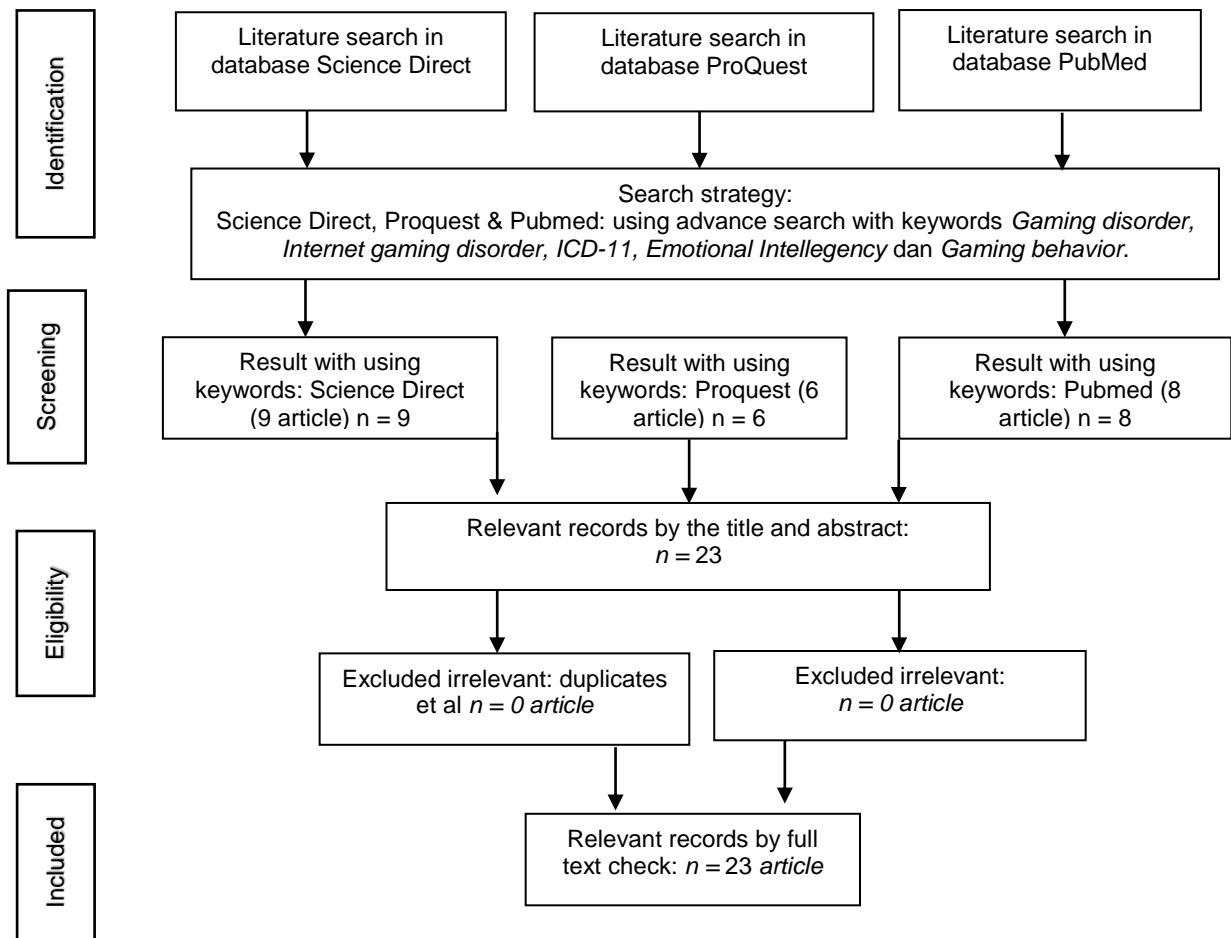


Figure 1. Searching for Literature and the Process of Election Articles Modification of Prisma Flow Diagram

5. Aprisial

The articles that have been obtained are then analyzed using the journal critic Joanna Brigg Institution (JBI) check list. Based on the appraisal carried out, a summary of the results of the study is attached to table 1 and synthesized into a systematic review.

Table 1. Summary of Research Results on the Effects of Gaming Disorder

| No | Authors (Year) | Title | Level (JBI) | Aim | Method | Sample | Intervention | Data Analysis | Result | Aspect |
|----|---|---|-------------|--|---|---|---|---|--|----------------|
| 1 | Chia-Yi Wu1, Ming-Been Lee, Shih-Cheng Liao, Li-Ren Chang (2015) U.S | Risk Factors Of Internet Addiction Among Internet Users: An Online Questionnaire Survey | JBI 4.a | Knowing the prevalence of internet addiction and the psychosocial and psychopathological determinants associated with internet users across all age groups | Cross-Sectional Study | A total of 1100 respondents consisted of 156 men, 944 women | The instrument was given to respondents with a grid CIAS-R), (BSRS-5), (MPI), and questions about suicide | T-Test Or F-Test | Revealed that the results significantly influence neuroticism, life disorders and time. (psychiatric morbidity 65%, suicidal ideation 47%, lifetime suicide attempts 23.1% and suicide attempts 5.1% a year | |
| 2 | Qiao Liang, Chengfu Yu, Quanfeng Chen, Xiaodong Xie, Han Wu, Jintao Xing, Shihua Huang And Kai Dou (2019) China | Exposure To Community Violence, Affiliations With Risk-Taking Peer Groups, And Internet Gaming Disorder Among Chinese Adolescents: The Moderating Role Of Parental Monitoring | JBI 2.a | Test whether parental monitoring moderates the relationship between ECV and IGD among adolescents, and whether this moderation effect is mediated by affiliations with peers who take risks. | Stratified And Random Cluster Sampling Techniques | A sample of 2,423 Chinese high school students | Data was collected using ECV Questionnaire, Parent Monitoring Questionnaire, Affiliation with Risk Taking Peer Group Questionnaire, IGD Questionnaire, and Impulsive Scale. | Compute Correlations And Descriptive Statistics | These results indicate adolescents are less able to understand the environment that is not good so that makes teens experience game disruption. Close parental monitoring can reduce the impact of gaming disorder | Self-awareness |

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|---|---|---|---------|--|--------------------------------|--|--|---|--|
| 3 | Daniel L. King, Madeleine C. E. Herd And Paul H. Delfabbro (2017) Australia | Tolerance In Internet Gaming Disorder: A Need For Increasing Gaming Time Or Something Else? | JB1 4.b | The criteria in DSM-5 internet game disruption (IGD) refer to the time spent playing games | Random | 630 Respondents conducted research | The researcher lets the respondent adjust all the rules that the researcher has set | Analyzed Using Thematic Analysis | The results showed that respondents with higher game addiction resulted in a large influence on mood. Increasing desire, the need to be involved in the game due to game disruption. |
| 4 | Süleyman Çakiroğlu, Nusret Soylu (2018) Turki | Adaptation Of Internet Gaming Disorder Questionnaire To Turkish: Reliability And Validity Study | JB1 4.a | This study aims to investigate the validity and reliability of the Turkish version of the Internet Gaming Disorder Questionnaire | Validity And Reliability Study | 1161 students aged between 10 and 18 from four different schools | Using a questionnaire completed with demographic data | Test-Retest Method And Cronbach's Alpha Internal Consistency Analysis | The results obtained are significant sub-dimensional correlations of the meaning of tolerance, mood modification, withdrawal, conflict and recurrence. |
| 5 | Sung Nyun Kim And Minah Kim (2018) Seoul | Increased Attentional Bias Toward Visual Cues In Internet Gaming Disorder And Obsessive-Compulsive Disorder: An Event-Related Potential Study | JB1 4.b | Analyzing the effect of IGD on nerve function | Qualitatif Study. | Twenty patients with IGD, 20 patients with OCD, and 23 healthy control subjects (HC) | Presentation as a researcher provides a flow so that respondents are more able to explore the correct answer without making or deliberate. | Independent Sample T-Tests | The results of this study indicate that game disorders affect nerve function. Internet gaming disorder includes potential addictions associated with compulsive gaming behavior. |
| 6 | Tony Durkee And Vladimir Carli (2016) | Pathological Internet Use And Risk-Behaviors Among European Adolescents | JB1 4.a | Investigate the relationship between behavioral risk and Piu (pathological | Cross-Sectional Study | 89,281 Respondents | Respondents were given a questionnaire and were given a vulnerability in each answer to see | One-Way Analysis Of Variance (Anova) With Post Hoc Pairwise | Shows that the risk prevalence of problem behavior is very significant with the high intensity of adolescents in internet use. Influence is also found in |

Self-regulation

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|---|--|---|---------|---|---|---|--|--|-------------------|--|
| | European | | | internet use) in European adolescents | | | | how they responded to what the researchers had determined | <i>Comparison</i> | lifestyle such as (sleep disturbance, nutritional disorders, and physical activity disorders) |
| 7 | Tagrid Leménager, Sabine Hoffmann, Julia Dieter, Iris Reinhard, Karl Mann And Falk Kiefer (2018) Germany | The Links Between Healthy, Addicted Internet Use Regarding Comorbidities And Self-Concept-Related Characteristics | JB1 3.a | The aim of the study was to examine differences, mobility and characteristics of self-concept related to healthy control of addiction and the use of problematic internet games | <i>Group Control Study</i> | n = 79 healthy controls, n = 35 problematic, and n = 93 addicted Internet users | Give different questions from each respondent who has been chosen and interpret the results | <i>Spss Analyses Of Variance (Anovas)</i> | 23 | Showing that game addiction has more influence on the decline in self-concept, ADHD, depression and anxiety. Game addiction also has the potential to experience personality disorders with a decrease in the level of characteristics associated with emotional intelligence. |
| 8 | Della L. Dang, Meng Xuan Zhang, Karlas Kin-Hei Leong And Anise M. S. Wu (2019) China | The Predictive Value Of Emotional Intelligence For Internet Gaming Disorder: A 1-Year Longitudinal Study | JB1 4.b | Test the protective effect of emotional intelligence on IGD tendencies | <i>Cross-Sectional Dan Longitudinal</i> | 282 respondent s were Macau university students in China | Survivors were conducted voluntarily with a vulnerable period of one year to complete the questionnaire that researchers had made which consisted of (IGD tendencies, emotional intelligence, coping and depression) | <i>Attrition Analyses, Descriptive Analyses, And Correlation Analyses (Pearson Correlation And Point-Biserial Correlation)</i> | | Stating that each variable has a big influence, especially the tendency of the emergency room with emotional intelligence, coping and depression levels. |

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|----|---|---|-------------------------------------|---------|---|---------------------|--|--|----------------------------------|--|
| 9 | Guangheng Dong, Lingxiao Wang, Xiaoxia Du, And Marc N. Potenza (2017) Shanghai, China | Gaming Craving To Gaming-Related Stimuli In Individuals With Internet Gaming Disorder | Increases To In Gaming | JB1 4.a | Analyzing the relationship between the emergency room with the desire to play, behavior and neurology | Correlation Analyse | 70 respondents | Conduct interviews with each respondent | Analyzed Using Spm8 And Neuroelf | The result of IDG is the loss of individual desire control and changes in the nervous system |
| 10 | Halley M. Pontes 1,2,* , Bruno Schivinski , Magdalena Brzozowski And Vasileios Stavropoulos (2019) Australia | Laxer Criteria For Gaming Disorder May Hinder Future Efforts To Devise An Efficient Diagnostic Approach: A Tree-Based Model Study | Clinical For Disorder Future Devise | JB1 4.a | Analyze the role played by each emergency room criteria in diagnosing game disorders | Survey Study | 3377 participants (mean age 20 years, elementary school = 4.3 years) | Data were collected using a questionnaire with the nine-item IGDS9-SF provisions | MCAR Test And Chi-Square | Gaming disorder says gamers lose control of themselves. Without the support to control or stop it will continue |
| 11 | Hyunsuk Jeong, Hyeon Woo Yim, Seung-Yup Lee, Hae Kook Lee, Marc N. Potenza, Jung-Hye Kwon, Hoon Jung Koo, Yong- | Discordance Between Self-Report And Clinical Diagnosis Of Internet Gaming Disorder In Adolescents | Self-Clinical Of Disorder | JB1 3.a | Estimating the level of overreporting (false positive) and underreporting (false negative) | Case-Sub-Cohort | 45 with IGD and 228 without IGD | Distribute questionnaires that include respondent characteristic data and Self-report assessment | ANOVA Test | Respondents with gaming disorder cause high anxiety, suicidal ideation, aggression, poor self-control, low self-esteem. As a result of too much time is used to play games |

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|----|--|--|---------|--|--------------------------|---|--|--|---|
| | Sil Kweon, Soo-Young Bhang & Jung-Seok Choi (2018) Korea | | | | | | | | |
| 12 | G.H. Schoenmaker, A.P. Groenman, E. Sokolov, J. Oosterlaan, N. Rommelse, H. Roeyers, R.D. Oades' S.V. Faraone B. Franke T. Heskes, A. Arias Vasquez, T. Claasse, J.K. Buitelaar (2018) Netherlands | Role Of Conduct Problems In The Relation Between Attention-Deficit Hyperactivity Disorder, Substance Use, And Gaming | JB1 4.d | Establish a causal model of the relationship between ADHD and comorbid behavior problems, and alcohol, nicotine, and other substance use | <i>Case-Only Study</i> | 362 individuals diagnosed with ADHD at the age of 12-24 years | Questionnaire with each aspect in accordance with the objectives of the researcher | <i>Bayesian Constraint-Based Causal Discovery (Bccd)</i> | That dependency on playing games has a causal path Related to ADHD |
| 13 | Muhannad Quwaidar, Abdullah Alabed And Rehab Duwairi | The Impact Of Video Games On The Players Behaviors: A Survey | JB1 4.a | Know the relationship between game addiction and game player behavior | <i>Qualitatif Study.</i> | 205 students | Given questionnaires and conduct interviews | <i>A Survey</i> | Game addiction makes student motivation becomes low, students do not have the desire to be smarter or seek knowledge. |

Self-motivation

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|----|---|--|---------|---|-----------------------|---|--|--|---|
| | (2019) Jordan | | | | | | | | |
| 14 | Vasileios Stavropoulos, Emma Ela Anderson, Charlotte Beard, Mohammed Qasim Latifi, Daria Kuss, Mark Griffiths (2019) Australia | A Preliminary Cross-Cultural Study Of Hikikomori And Internet Gaming Disorder: The Moderating Effects Of Game-Playing Time And Living With Parents | JB1 4.a | Analyzing the relationship between Hikikomori and the ER, and the potential moderate effect of playing games and living with parents. | Cross-Sectional Study | 153 young adult players are from Australia and 457 adults are from the U.S. North America | Questionnaires were given based on the Nine Scale Internet Gaming Disorder-Short Form (IGDS-SF9), and the Hikikomori Social Withdrawal Scale | Linear Regression Analyses | The results show that, the occurrence of withdrawal or (Hikikomori) experienced by young adults is closely related to game addiction. |
| 15 | Socayna Moudiab, Marcantoni M. Spada (2019) London, Uk | The Relative Contribution Of Motives And Maladaptive Cognitions To Levels Of Internet Gaming Disorder | JB1 5.a | Identifying maladaptive motivation and cognitive | Correlation Analyse | 79 participant s in London, UK | Using a short questionnaire form | A Pearson Product Moment Correlation Linear Regression Analysis | Each item has a close relationship between game addiction that results in decreased mitivation and maladaptive cognitive |
| 16 | Tobias Greitemeyer (2018) Austria | The Spreading Impact Of Playing Violent Video Games On Aggression | JB1 5.a | Analyze the existence of violent behavior and aggression resulting from game addiction | Descriptive Analysis | 499 male, 499 female | Given demographic questionnaire, aggressive behavior. Each participant receives 10 items | A Sobel Test | Game addiction is proven to increase violent behavior and acts of aggression. |
| 17 | Joe L Billieux, | Cognitive Factors Associated With | JB1 3.d | Analyze the causal factors | Case-Control | 56 individuals | Using a documentation | Descriptive Analysis | Factors resulting from game addiction include: |

Self Empathy

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|----|--|---|---------|---|-------------------------|---|---|--|---|
| | Marc N. Potenza, Pierre Maurage, Damien Brevers, Matthias Brand' And Daniel L. King (2019) Luxemburg | Gaming Disorder | | of game addiction | <i>Designs</i> | and 61 respondent s | system to observe cognitive, affective and psychomotor | | loss of feelings or sensitivity to the environment and social, the emergence of high ignorance, strengthening sensitivity, and executive function |
| 18 | Cuneyt Evren, Bilge Evren, Ercan Dalbudak , Merve Topcu , Nilay Kutlu (2019) Turkie | Relationship Of Internet Gaming Disorder Severity With Symptoms Of Anxiety, Depression, Alexithymia, And Aggression Among University Students | JB1 5.a | The purpose of this study was to evaluate the relationship of the severity of internet gaming disorders with alexithymia And aggression among students, while controlling the effects of anxiety and depressive symptoms. | <i>Online Survey</i> | 987 university volunteer students in Ankara | Participants were evaluated by managing the Alexithymia Scale (TAS-20), the Buss-Perry Aggressive Questionnaire (BPAQ), the Gaming-Short-Form Internet Disruption Scale (IGDS9-SF), and the depression and anxiety subscale of the 90-Revised Symptom Item Checklist (SCL-90-R) | <i>Linear Regression Analysis</i> | This finding shows that among students The effect of more gaming disorders is alexithymia "difficulty identifying feelings" |
| 19 | Daniel L. King, Cam Adair, John B. | Clinical Predictors Of Gaming Abstinence In Help-Seeking | JB1 2.a | Analyzing the effectiveness of interventions | <i>Follow Up Survey</i> | 186 adult gamers | Providing questionnaires related to DSM-5 Internet gaming | <i>Mann-Whitney U Tests And Chi-Square</i> | Respondents experience mood disorders and poor quality of life |

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|----|--|--|---------|---|--|---|--|--|---|
| | Saunders, Paul H. Delfabbro (2018) Canada | Adult Problematic Gamers | | for problematic games due to the IGD | | | disorder (IGD), Depression Anxiety Scales-21, Internet Cognition Scale, Gaming Craving Scale, and Gaming Quality of Life Scale | <i>Tests</i> | |
| 20 | Wavne Rikkers, David Lawrence, Jennifer Hafekost And Stephen R. Zubrick (2016) Australia | Internet Use And Electronic Gaming By Children And Adolescents With Emotional And Behavioural Problems In Australia – Results From The Second Child And Adolescent Survey Of Mental Health And Wellbeing | JB1 4.a | Explain the current internet usage and behavior of electronic games that have an impact on mental disorders | <i>Random Sampling</i> | A total of 2967 respondent s aged 11-17 years | The survey was conducted based on how much time the respondent spent, measurements were made every 2 hours during the survey process | <i>Regression Logistic Multivariat</i> | Teenagers suffer from emotional problems or high psychological pressure. resulting in poor social relations. |
| 21 | Netta Weinstein, Andrew K. Przybylski And Kou Murayama (2017) U.K | A Prospective Study Of The Motivational And Health Dynamics Of Internet Gaming Disorder | JB1 4.b | Investigate the etiology and personal results of internet gaming disorder | <i>Sensitivity Analysis Exploratory Analyses</i> | Responden ts were 5777 aged 18 years | Respondents were given questions and were also asked to do what the researchers had planned, which aims to see the criteria and the angle of the response field to the methods and framework that the researchers had determined | <i>Sem Negative Binomial Regression Analysis</i> | Consistent results indicate that the negative impact of internet gaming disorder occurs on social activities and basic needs. |

Social Skills

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|----|---|--|---------|--|---------------------------|-----------------------------------|--|----------------------------------|---|
| 22 | Chih-Hung Ko1,2,3, Huang-Chi Lin3,4, Pai-Cheng Lin4,5 And Ju-Yu Yen (2019) Australian And New Zealand | Validity, Functional Impairment And Complications Related To Internet Gaming Disorder In The DSM-5 And Gaming Disorder In The ICD-11 | JB1 3.d | Evaluating functional disorders, unhealthy behaviors and complications among adults with internet game disorders and game disorders. | <i>Case Control</i> | 69 regular gamers and 69 controls | Conducting interviews, Interviewing conducted by a psychiatrist according to the DSM-5 Internet gaming disorder criteria | <i>One-Way Analysis</i> | The results obtained respondents have impaired academic function, work or social. |
| 23 | Hee Jung Seok, Jeoung Min Lee, Chi-Yong Park, Ji Young Park (2018) Korea | Understanding Internet Gaming Addiction Among South Korean Adolescents Through Photovoice | JB1 4.a | Explore the motivation of teenagers for internet games, how their lives are affected, how they view internet games, what they have gained and lost, and how they understand internet game addiction. | <i>Qualitative Study.</i> | 10 teenagers are at risk of IGD | Interviews, focus groups, and photo invoices All respondents | <i>Utilized Photovoice Study</i> | These results indicate that regard internet games as a way for entertainment, stress relief, and peer bond. |

C. RESULTS AND DISCUSSION

Based on the questions made by researchers namely how the impact of gaming disorder on adolescent emotional intelligence, the results show mixed data. The different results are adapted to the system, and the conditions of the country or place of each study. The impact of gaming disorder is indeed very significant on each aspect of adolescent emotional intelligence.

The source obtained clearly seen that the effects of gaming disorder interfere with adolescent emotional intelligence. The most impact on emotional intelligence is on aspects of self-regulation. Gaming disorder increases lifestyle disorders, suicidal ideas, compulsive behaviors, loss of self-control and disruption of physical activity (Dang, Zhang, Leong, & Wu, 2019; Dong, Wang, Du, & Potenza, 2017; Jeong et al., 2018; Pontes, Schivinski, Brzozowska-woś, & Stavropoulos, 2019; Schoenmacker et al., 2018; Seok, Lee, Park, & Park, 2018; Stavropoulos et al., 2019). As a result of gaming disorder makes adolescents lose self-regulation which should be developed in adolescence to be more able to control themselves well.

The impact on aspects of self-awareness resulting from gaming disorder is making it difficult for adolescents to understand environmental conditions, the lack of excessive desire and affect self-understanding (Kim et al., 2018; King, Herd, & Delfabbro, 2017; Liang et al., 2019; Çakiroğlu, 2018; Wu, Lee, Liao, & Chang, 2015). The aspect of self-awareness on emotional intelligence also has a big influence on adolescents, because if it has been affected by gaming disorder it will make teenagers more difficult to understand themselves. Aspects of self-motivation in adolescents who experience gaming disorder resulting in a decrease in the learning process, withdrawal and reduce the desire to seek knowledge (Moudiab & Spada, 2019; Quwaidar, Alabed, & Duwairi, 2019; Stavropoulos et al., 2019).

The self-empathy aspects of teen gaming disorder do not have sensitivity to the environment, violent behavior and can suffer from alexithymia (Evren, Dalbudak, Topcu, & Kutlu, 2019; Greitemeyer, 2018; King et al., 2018; Potenza, Maurage, Brevers, Brand, & King, 2019). The impact of gaming disorder on aspects of social skills on emotional intelligence results in poor social relations, decreases interest in social activities, loss of entertainment in the environment and disruption of academic and social functions (Ko, Lin, Lin, & Yen, 2019; Rikkers, Lawrence, Hafekost, & Zubrick, 2016; Seok et al., 2018; Weinstein, Przybylski, & Murayama, 2017).

This means that gaming disorder is indeed worthy of being used as a patent diagnosis for mental disorders. The impact caused by gaming disorder has a lot of empirical evidence which in the future also requires further treatment for sufferers of gaming disorder in the future.

D. CONCLUSION

The impact of gaming disorder on adolescent emotional intelligence for now really needs to be aware of, because not a few problems that afflict adolescents due to gaming. WHO regulation to include gaming disorder as ICD-11 is indeed very

appropriate with the increasing number of problems due to gaming disorder. Gaming disorder is the main trigger that affects the emotional intelligence of adolescents today. The highest aspect due to gaming disorder is in the aspect of self-regulation, but aspects of self-awareness, self-empathy, self-motivation and social skills also have a significant impact. Emotional intelligence is very important to be mastered in life, if emotional intelligence has been disturbed due to gaming disorder then the five aspects of emotional intelligence will also be disturbed.

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