

# Comparing parenting styles: their influence on adolescent's internet addiction

Rika Sarfika,<sup>1</sup> Gina Faizah Zein,<sup>2</sup> Riska Andreni,<sup>2</sup> Randy Refnandez,<sup>1</sup> I Made Moh. Yanuar Saifudin<sup>3</sup>

<sup>1</sup>Department of Mental Health and Community, Faculty of Nursing, Universitas Andalas, Padang; <sup>2</sup>Faculty of Nursing, Universitas Andalas, Padang; <sup>3</sup>Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia

## Abstract

Excessive internet use in adolescents can lead to addiction, with parental parenting styles playing a pivotal role. This study aimed to analyze the relationship between parents' parenting style and adolescent internet addiction. A cross-sectional study was conducted with a sample of 290 participants using convenience sampling. Two instruments, the Parental Authority Questionnaire

(PAQ) and Internet Addiction Test (IAT), were employed for data collection. Statistical analysis, using the Spearman correlation test ( $p < 0.05$ ), was performed. Findings revealed a significant relationship ( $p < 0.001$ ,  $r = 0.253$ ) between an authoritarian paternal parenting style and adolescent internet addiction. A permissive maternal parenting style also exhibited a significant link ( $p < 0.001$ ,  $r = 0.319$ ) with internet addiction. This study highlights a clear association between parenting styles and adolescent internet addiction. Parents should balance granting freedom for responsible internet use with setting boundaries, engage in open dialogues, and issue warnings when excessive online time is detected to effectively address this issue.

Correspondence: Rika Sarfika, Department of Mental Health and Community, Faculty of Nursing, Universitas Andalas, 25163 Padang, Indonesia.

E-mail: rikasarfika@nrs.unand.ac.id

Key words: adolescent, internet addiction, parenting style.

Contributions: RS, study conception and design, data collection, literature review/analysis, manuscript writing, critical revisions for important intellectual content; GFZ, study conception and design, data collection, literature review/analysis, manuscript writing; RA, data collection, literature review/analysis, manuscript writing; RR, manuscript writing, critical revisions for important intellectual content; IMMYS, manuscript writing, critical revisions for important intellectual content. All the authors approved the final version to be published.

Competing of interest: the authors declare no potential conflict of interest.

Funding: This study does not receive any external funding.

Ethical approval: ethical approval for the study was granted by the Research Ethics Committee of the Faculty of Nursing at Andalas University, Padang, Indonesia (Approval number: 078.laiketik/KEPK-FKEPUNAND). All participants provided informed consent.

Informed consent: all patients participating in this study signed a written informed consent form for participating in this study.

Availability of data and material: the data is not accessible to the public as it contains information that might compromise the confidentiality of the research participants. Data can be made available upon a reasonable request.

Acknowledgments: the authors thank to all participants in this study.

Received: 8 October 2023.

Accepted: 17 November 2023.

Early access: 15 December 2023.

This work is licensed under a Creative Commons Attribution 4.0 License (by-nc 4.0).

©Copyright: the Author(s), 2023

Licensee PAGEPress, Italy

Healthcare in Low-resource Settings 2024; 12:11932

doi:10.4081/hls.2023.11932

*Publisher's note: all claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article or claim that may be made by its manufacturer is not guaranteed or endorsed by the publisher.*

## Introduction

Along with the rapid development of technology, the internet has enhanced many aspects of our lives by becoming an integral part of our daily experiences. The internet offers a wide range of services, and its usage is expanding across all age groups.<sup>1</sup> Digital technology has made it easier for everyone to connect and share common interests without any geographical or temporal barriers. It is convenient, flexible to access, and affordable, especially in developed countries.<sup>2</sup> The International Telecommunication Union (ITU) stated that the number of internet users worldwide would reach 5.3 billion in 2022, encompassing 66% of the world's population. This figure represented an 8.16% increase from the previous year when the number stood at 4.9 billion. It is estimated that approximately 60% of the world's population uses the internet, with Asia having the largest number of internet users, followed by Europe.<sup>3</sup> According to a survey conducted by the Association of Internet Service Providers in Indonesia (AISPI)<sup>4</sup> the number of internet users in Indonesia reached 215.63 million people in the 2022-2023 period, out of Indonesia's total population of 275.77 million people. This figure marked a 2.67% increase compared to the previous period, which had 210.03 million users. Notably, the majority of internet users in Indonesia fall within the age group of 15-19 years, accounting for 91% of the total. In 2019, internet users in West Sumatra constituted the third-largest group, following North Sumatra and South Sumatra, at 41.15%. In Padang, internet usage in 2019 stood at 35%, with 1.8 million users. The primary activities people engaged in were accessing social media, seeking information, and playing online games.<sup>5</sup>

Excessive internet usage can be termed as internet addiction. Internet addiction is a pathological condition, characterized by obsessive-compulsive behavior, which drives a person to use technology excessively. Compulsive internet use has emerged as a modern addictive behavior<sup>6</sup> Internet addiction is more common

among adolescents. Adolescence is a transitional period from childhood to adulthood.<sup>7</sup> This is because adolescents are in a critical stage of identity development, marked by their high curiosity, a constant desire to try new things, and susceptibility to peer influence.<sup>8</sup> Moreover, adolescents are considered vulnerable and at risk of developing internet addiction due to their immature self-control, easy access, and flexible schedules.<sup>9</sup> In Indonesia, internet users are typically aged between 13 and 18 years, with around 98.20% of this age group being connected to the internet.<sup>10</sup> A previous study<sup>11</sup> revealed that the main factor contributing to adolescents' internet addiction is their parents' parenting style. Low parental supervision of adolescents is a significant predictor of internet addiction in this age group.<sup>12</sup> Most parents in Indonesia tend to exhibit an indifferent parenting style, characterized by a lack of communication, support, and low control, particularly concerning internet usage. This indifference can lead children towards the negative aspects of the internet.<sup>13</sup> Parenting styles differ between fathers and mothers. The mother's role often focuses on verbal interactions, such as caregiving and providing affection, while the father's role typically involves more physical interactions and engaging in activities together. When children receive proper care from both parents, it can help identify and prevent various issues related to adolescent deviance.<sup>14</sup>

Online gaming, online gambling, social networking, email, and pornographic websites can all contribute to internet addiction.<sup>15</sup> Internet addiction can be particularly detrimental to users, especially young individuals, impacting their health, both physically and psychologically.<sup>16</sup> The physical health effects of internet addiction encompass eating problems, self-care neglect, dry and strained eyes, back discomfort, headaches, neck pain, and pain in the arms and joints.<sup>17</sup> Adolescents may struggle to regulate their constant urge to use the internet, which can disrupt their learning activities and affect their academic performance at school.<sup>18</sup> The existence of internet addiction problems in adolescents related to parental parenting styles was also demonstrated in prior research<sup>19</sup> conducted on 114 adolescents in Pakistan. The research results reveal a significant relationship between parenting styles and internet addiction among adolescents. A majority of adolescents, or 77.2%, admit to being internet addicts, and their parents' parenting styles are predominantly authoritarian and permissive. These parenting styles are linked to internet addiction in adolescents. The Technological Educational Institute (TEI) in Heraklion, Greece, found that parenting styles can determine the risk of internet addiction in adolescents. According to the findings of this study, adolescents whose parents frequently exhibit behaviors such as yelling, being unmoved, and making excessive demands may be at risk of developing internet addiction. Conversely, a warm, loving, and protective parenting style can reduce the likelihood of internet addiction. According to this research, poor parenting practices can lead to adolescent irritability, hinder their ability to make friends, and increase the risk of developing internet addiction.<sup>20</sup>

Considering the high prevalence of internet addiction issues in adolescents, it is imperative to understand the relationship between parenting styles and adolescents. The aforementioned explanation supports researchers in developing a connection between parenting style and internet addiction in adolescents. While the relationship between parenting practices and adolescent behavior has been extensively discussed in the literature, a significant knowledge gap remains regarding the precise link between parenting practices and adolescent internet addiction. An empirical investigation has revealed that the majority of adolescents spend a significant portion of their free time online. The most notable connection found between compulsive internet use in adolescent girls and

boys is the neglectful parenting style.<sup>21</sup>

The existing literature has addressed the influence of parenting styles on adolescent behavior in general but often lacks a specific focus on the relationship between parenting styles and adolescent internet addiction, leaving a noticeable gap in our understanding of this particular issue. Moreover, previous studies have not comprehensively examined the distinct effects of various parenting styles on internet addiction in adolescents. These gaps in prior research underscore the importance of the current study in contributing to a more comprehensive understanding of the subject. Therefore, this study aims to analyze the relationship between parental parenting styles and adolescent internet addiction in Padang, Indonesia.

## Materials and Methods

This study employed a correlational research approach with a cross-sectional design. The research was conducted between March 2023 and June 2023 and included participants who met specific criteria: students in grade 10<sup>th</sup> and 11<sup>th</sup> who used smartphones, were living with their parents at the time of the study, and were willing to participate as respondents. Conversely, students who were unavailable during the research period were excluded from participation.

The study's target population consisted of students attending Public Senior High School (PSHS) in PSHS 9 Padang. We used a convenience sampling method to select our sample. The sample size was determined using G\*Power software (latest version 3.1.9.7; Heinrich-Heine-Universität Düsseldorf, Düsseldorf, Germany). Based on a correlation coefficient ( $\rho$ ) of 0.30, a significance level ( $\alpha$ ) of 0.01, and a statistical power ( $1-\beta$ ) of 0.99 (14), the calculated minimum sample size required was 222 participants. However, in the end, 290 respondents completed the survey. We used a convenience sampling method to collect the data. This approach was selected for its practicality and efficiency, considering time constraints and pandemic-related limitations. Although it can introduce bias, it was a pragmatic choice, and researchers are aware of its limitations.

This research was conducted with the permission of the Padang City Health Service and the nursing faculty of Andalas University. Ethical approval was obtained before commencing the study. The homeroom teachers of the 2022 and 2023 classes assisted the researcher in gaining access to the classrooms. Subsequently, the researcher explained the research's aims and objectives to the respondents and sought their consent. Once the informed consent forms were completed, the researcher provided instructions on how to complete the questionnaire and administered it through a Google Form, which had been designed and pilot-tested with 15 adolescents to ensure its functionality and user-friendliness. Respondents were allotted 20 minutes to complete the questionnaire and were encouraged to ask the researcher any questions they might have had. After the questionnaire was completed, the researcher reviewed it and concluded the activity. Data security and privacy were maintained by ensuring respondent anonymity regarding their name and address. Additionally, the use of a secure platform (Google Forms), ethical review, and de-identification for data sharing ensured data security and privacy.

The research utilized two assessment tools to evaluate parental parenting behaviors and internet addiction. The Parental Authority Questionnaire (PAQ),<sup>22</sup> adapted into an Indonesian version,<sup>23</sup> was employed to assess parental parenting behaviors. This

questionnaire has undergone validation and reliability testing, demonstrating a strong correlation coefficient and a Cronbach Alpha value of 0.794, indicating its reliability. To measure internet addiction, the study used the Internet Addiction Test (IAT),<sup>24</sup> which was also adapted into an Indonesian version.<sup>25</sup> This questionnaire has undergone validation and reliability testing, resulting in a high correlation coefficient and a Cronbach Alpha value of 0.895, signifying its reliability. Data analysis consisted of univariate analysis, presented through a frequency distribution table, bivariate analysis conducted using the Spearman Test, and multivariate analysis performed using linear regression. Additionally, a p-value of <0.05 was considered as significant.

## Results

### Respondents' characteristics

Table 1 indicates that slightly over half of the respondents, 59.3%, were female. Additionally, a significant majority, 89.3%, belonged to the middle adolescent age group (15 to 17 years old). Furthermore, 50.7% of the respondents were in the 10<sup>th</sup> grade.

In terms of parenting styles, the highest median score for fathers was observed for authoritarian parenting (Median=18), whereas for mothers, democratic parenting had the highest median score (Median=17). The median score for internet addiction among adolescents was 49, classifying it as mild online addiction, falling within the range of 32 to 83.

### Relationship between parenting style towards internet addiction

Table 2 presents the findings regarding the correlation between a father's authoritarian parenting style and internet addiction in adolescents. The results indicate a highly significant relationship, with a p-value of <0.001 (p<0.05). The correlation coefficient value obtained was 0.253, indicating a weak strength of the relationship. In this context, the father's authoritarian parenting style displayed a relatively weak positive correlation with internet addiction, suggesting that as the father's authoritarian parenting style increases, there is a corresponding increase in internet addiction among adolescents. Similarly, the correlation analysis between mothers' permissive parenting style and internet addiction in adolescents, as shown in Table 2, revealed a highly significant relationship with a p-value of <0.001 (p<0.05). The correlation coefficient value was 0.319, indicating a weak strength of the relationship. In this case, the mother's permissive parenting style demonstrated a weak positive correlation with internet addiction, meaning that as the level of permissive parenting by the mother increases, there is a corresponding increase in internet addiction among adolescents

### Regression analysis results

Table 3 presents a series of independent variables and their associated p-values: Age (p>0.421), gender (p<0.021), class (p>0.770), permissive father's parenting style (p>0.814), authoritarian father's parenting style (p>0.574), democratic father's parenting style (p<0.000), permissive mother's parenting style (p>0.845), authoritarian mother's parenting style (p> 0.140), and democratic mother's parenting style (p<0.000).

The study's findings indicate that gender is the most influential predictor (β=0.136) of internet addiction among students at Senior High School 9 Padang. Additionally, the calculated F value for the

democratic mother's parenting style is 39.298 with a significance level of <0.05, suggesting that this regression model is suitable for predicting the relationship between parenting styles and the internet addiction variable. Moreover, the variance in internet addiction is explained by gender by as much as 1.8%, the democratic mother's parenting style by as much as 7.8%, and the democratic mother's parenting style by as much as 12%

## Discussion

Parenting style pertains to the manner and pattern of actions consistently used by parents as they care for and raise their children. It encompasses a range of elements, including parental attitudes, beliefs, methods of discipline, and emotional receptiveness demonstrated in their interactions with their children.<sup>26</sup> This study aims to examine the association between parenting styles, including those of the father and mother, and internet addiction in adolescents. The findings of this research indicate that internet addiction in adolescents is related to parental parenting style.

**Table 1.** Characteristics of respondents, parenting style and internet addiction (n=290).

Variable	f%	
Gender		
Man	118	40.7
Woman	172	59.3
Age (years)		
Middle adolescent (15-17 years)	260	89.6
Late adolescents (18-20 years)	30	10.4
Class level		
Grades 10	147	50.7
Grades 11	143	49.3
Variable	Median	Min-Max
Father's parenting style		
Permissive	17	9-23
Authoritarian	18	9-26
Democratic	17	9-24
Mother's parenting style		
Permissive	16	7-25
Authoritarian	16	7-28
Democratic	17	7-27
Internet addiction	49	32-83

**Table 2.** The relationship between father's parenting style, mother's parenting style towards internet addiction.

Variable	Internet addiction		
	Correlation coefficient (r)	R <sup>2</sup>	p
Father's parenting style			
Permissive	0.038	0.001	0.522
Authoritarian	0.253	0.064	<0.001*
Democratic	0.043	0.001	0.463
Mother's parenting style			
Permissive	0.319	0.101	<0.001*
Authoritarian	0.066	0.004	0.260
Democratic	0.071	0.005	0.225

Spearman rank test was performed, \*p<0.05.

The father's parenting style in this study demonstrates a tendency towards authoritarianism, with a mean value of 18, representing approximately 60%. These findings align with a previous study,<sup>27</sup> which reported a prevalence of authoritarian parenting among fathers at 58.4%. Moreover, fathers who adopt an authoritarian parenting style emphasize their children's compliance with set rules without involving them in the decision-making process. This is supported by the fact that nearly all adolescents, or 43.4%, agree that their fathers require them to follow the rules without discussion. Fathers in this study also tend to discipline their children if they disobey or fail to meet their expectations. This is evident as some adolescents, or 50.3%, confirm that their fathers communicate their desires, and if these wishes aren't fulfilled, their fathers will impose punishment.

The findings of a study on maternal parenting style indicate that maternal parenting tends to be democratic, with a mean value of 17, encompassing around 57%. These findings are consistent with a previous study,<sup>14</sup> which also reported that the predominant maternal parenting style in this study was democratic, at 43%. Another research<sup>28</sup> similarly found that mothers tend to adopt a democratic parenting style, with a prevalence of 61.43%. Regarding permissive mother's parenting style, the median score for permissive parenting is 16, representing around 53% who tend to experience permissive parenting from their mothers. Based on the results, it appears that mothers may not be overly concerned about their children's behavior. This is supported by the fact that 39.3% of adolescents agree that their mothers do not pay much attention to their actions.

Considering the outcomes, the mean score for democratic parenting was 17, with approximately 57% tending to receive democratic parenting from their father. The characteristics of a democratic parenting style involve treating adolescents in accordance with their wishes and developmental stage. However, every parenting style should also incorporate established norms and deter deviant behavior to provide a sense of security.<sup>29</sup> This is supported by the fact that almost all adolescents, or 42.4%, agreed that their fathers provided guidance for their behavior and activities, while still being open to listening and discussing their preferences if they didn't comply with their father's rules. In this study, the median score for permissive parenting was 17, with around 57% receiving permissive parenting from their father. In this permissive parenting style, the father may not closely monitor their child's actions, as evidenced by 71 adolescents (24.5%) agreeing that their father allows them significant autonomy to

make their own decisions. The study's median score for authoritarian parenting is 16, with as many as 53% tending to experience an authoritarian parenting style from their mother. Mothers who adopt an authoritarian parenting style emphasize their child's compliance with established rules without involving the child in decision-making. This is supported by the fact that almost all adolescents, or 41.0%, agree that their mothers compel them to follow instructions in accordance with their mother's wishes. Adolescents engaging in internet addiction behavior comprise up to 47% of those with permissive parenting.<sup>30</sup> Adolescents raised by permissive parents often have the flexibility to use the internet without significant demands from their mothers or facing consequences for mistakes or violations made while using the internet.<sup>14</sup>

The results concerning internet addiction in adolescents at PSHS 9 Padang revealed an average internet addiction score of 49. These findings categorize internet addiction in adolescents as being in the mild category, consistent with previous research.<sup>31</sup> It's worth noting that the average internet addiction among adolescents in this study was 42, also classified as mild internet addiction. Additionally, previous research reported an average internet addiction score of 41.40, which falls within the mild category.<sup>25</sup>

This study's findings demonstrate the correlation between fathers' authoritarian parenting style and internet addiction in adolescents. These results are in line with a previous study<sup>19</sup> conducted in Pakistan, which also indicates a significant relationship between fathers' authoritarian parenting style and internet addiction. Fathers who employ an authoritarian parenting style typically avoid discussing expectations and rules for internet use with adolescents, causing adolescents to conform to the standards set by their parents. In response to the lack of family warmth, adolescents often seek solace in increased online activities, such as playing online games, which can ultimately contribute to their growing internet addiction.<sup>32</sup> Similar findings are also reflected in a previous study,<sup>14</sup> where the authoritarian parenting style of parents who exercise excessive control over their children while showing little affection in their interactions with them tends to compel children to be more self-reliant. Additionally, they tend to avoid discussing expectations and guidelines for internet use with their children, which can lead to children expressing their dissatisfaction by engaging in more online activities, potentially resulting in internet addiction among adolescents.

This study's findings also revealed a correlation between mothers' permissive parenting style and internet addiction in

**Table 3.** Linear regression analysis.

Variable	Internet addiction			Cohens'f	Constant	p
	B	$\beta$	R <sup>2</sup>			
Age	-1.424	-0.047	0.002	0.650	52.806	0.421
Gender	2.488	0.136	0.018	5.390	45.966	0.021
Class	-0.318	-0.017	0.000	0.086	50.268	0.770
Father's parenting style						
Permissive	-0.038	-0.014	0.000	0.056	50.457	0.814
Authoritarian	-0.066	-0.033	0.001	0.316	50.974	0.574
Democratic	-0.672	-0.279	0.078	24.241	60.803	<0.001*
Mother's parenting style						
Permissive	0.032	0.012	0.000	0.038	49.285	0.845
Authoritarian	0.173	0.087	0.008	2.185	46.993	0.140
Democratic	-0.795	-0.347	0.120	39.298	62.748	<0.001*

\*p<0.05.

adolescents. These results align with a previous study<sup>33</sup> conducted in Iran, which also demonstrates a significant correlation between mothers' permissive parenting style and internet addiction. Mothers who adopt a permissive parenting style tend to grant excessive freedom, especially concerning internet use, which can leave adolescents uncertain about the appropriateness of their actions. In terms of internet usage behavior, adolescents who perceive their mother's parenting as permissive are more likely to prioritize their own satisfaction by using the internet without constraints. Mothers with limited knowledge are at risk of not understanding the boundaries of internet use and the potential negative impacts on their children who may develop internet addiction.<sup>34</sup>

The practical implications of this study hold notable significance for parents, educators, and policymakers. Educating parents about the potential repercussions of extreme authoritarian or permissive parenting can empower them to establish a more balanced approach to setting internet usage boundaries within their families. Actively involving parents in their children's online activities can enhance their understanding of the digital environment and promote responsible navigation.

In cases where adolescents are at risk of internet addiction, readily accessible counseling and intervention programs are essential. Identifying signs of addiction and delivering appropriate support is paramount for both prevention and early intervention. Encouraging media literacy among adolescents is equally valuable, equipping them with the knowledge and skills to make informed decisions while using the internet.

It's important to acknowledge that the generalizability of this research is subject to certain constraints. Notably, the study's cultural specificity, conducted in Padang, Indonesia, means that the impact of parenting styles on adolescent internet addiction may vary in diverse cultural and regional contexts. Furthermore, the characteristics of the study's sample, encompassing age, socioeconomic status, and other demographic factors, can influence the extent to which the findings can be applied to other populations, especially considering the use of convenience sampling in the research.

## Conclusions

The study links parenting styles to adolescent internet addiction, finding dominant authoritarian and democratic practices among fathers and mothers, respectively. Its findings, rooted in a specific cultural setting, suggest limited applicability elsewhere. For broader relevance, future research should include diverse cultural examinations and broader sampling. Addressing internet addiction in adolescents may involve balanced parental regulation, open communication, and guidance on internet use.

## References

- Lu, L. et al. Internet Addiction in Tibetan and Han Chinese Middle School Students: prevalence, demographics and quality of life. *Psychiatry Res* 2018;268:131-6.
- Purwaningsih E, Nurmala I. The impact of online game addiction on adolescent mental health: A systematic review and meta-analysis. *Open Access Maced J Med Sci* 2021;9:260-74.
- Tung SEH, Gan WY, Chen JS, et al. Internet-Related Instruments (Bergen Social Media Addiction Scale, Smartphone Application-Based Addiction Scale, Internet Gaming Disorder Scale-Short Form, and Nomophobia Questionnaire) and Their Associations with Distress among Malaysian University Students. *Healthcare (Switzerland)* 2022;10(8).
- APJII. Hasil Survei Penetrasi dan Perilaku Pengguna Internet Indonesia [Internet]. 2021. Available from: <https://apjii.or.id/survei>
- Vitria N. Pengaruh Internet Bagi Siswa-Siwi SMA Negeri 3 Padang. *Science, Engineering, Education, and Development Studies (SEEDS): Coference Series* 2021;4:2.
- Rachmawati PD, Rachmawati D. The correlation of Internet addiction towards adolescents' social interaction. *Int J Adolesc Med Health* 2022;34:351-5.
- Sugiarti R, Erlangga E, Suhariadi F, et al. The influence of parenting on building character in adolescents. *Heliyon* 2022;8:e09349.
- Lombogia BJ, Kairupan BHR, Dundu AR. Hubungan Kecanduan Internet dengan Kualitas Tidur pada Siswa Kristen 1 Tomohon. *Jurnal Medik Dan Rehabilitasi* 2018;1(2).
- Setiawati Y, Hartanti DT, Husada D, et al. Relationship between Paternal and Maternal Parenting Style with Internet Addiction Level of Adolescents. *Iran J Psychiatry* 2021; 16:438-43.
- APJII. Survei Penetrasi & Perilaku Internet [Internet]. 2023. Available from: <https://survei.apjii.or.id/>
- Smart A. Cara Cerdas Mengatasi Anak Kecanduan Game. Yogyakarta: A+ Plus Books; 2010.
- Karaer Y, Akdemir D. Parenting styles, perceived social support and emotion regulation in adolescents with internet addiction. *Compr Psychiatry* 2019;92:22-27.
- Hidaayah N, Yunitasari E, Nihayati HE, et al. Parenting stress against symptoms of gadget addiction in elementary school age during the COVID-19 pandemic. *Bali Med J* 2022;11:1189-94.
- Bibelia JT, Hidayati NO, Somantri I. Pola asuh orang tua pada remaja dengan kecanduan internet. *Holistik Jurnal Kesehatan. Holistik Jurnal Kesehatan* 2021;15:166-175.
- Novianty DD, Sriati A, Yamin A. Gambaran penggunaan dan tingkat kecanduan internet pada siswa-siswi SMA X di Jatinangor. *Jurnal Keperawatan Komprehensif (Comprehensive Nursing Journal)* 2019;5:76-87.
- Gandaputra SA, Waluyo I, Efendi F, Wang JY. Insomnia status of middle school students in indonesia and its association with playing games before sleep: Gender difference. *Int J Environ Res Public Health* 2021;18:1-10. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85099389697&doi=10.3390%2Fijerph18020691&partnerID=40&md5=dac915240286a4634f0f5b8b106351a1>
- Karacic S, Oreskovic S. Internet Addiction and Mental Health Status of Adolescents in Croatia and Germany. *Psychiatr Danub* 2017;29:313-321.
- Putra PY, Fithriyah I, Zahra Z. Internet Addiction and Online Gaming Disorder in Children and Adolescents During COVID-19 Pandemic: A Systematic Review. *Psychiatry Investig* 2023;20:196-204.
- Hussain M, Hassan I, Masood M, Gillani SAAS. Analyzing the association between internet addiction level of adolescents and paternal and maternal parenting style. *NeuroQuantology* 2023;21:42-49.
- Prambay I, Dewi MS. Adiksi Internet pada Remaja. 2019.
- Tur-porcar A. Parenting styles and Internet use. 2017;1016-22.

22. Baumrind D. The influence of parenting stylr on adolescent competence and substance use. *J Early Adolesc* 1991;11:56-95.
23. Yusridawati Y, Kawati Y. Hubungan Pengetahuan dan Tindakan Ibu dengan Peningkatan Status Gizi Balita yang Mengalami Gizi Kurang di Puskesmas Bromo Medan Tahun 2018. *Jurnal penelitian pendidikan, psikologi dan kesehatan* 2020;1:68-74.
24. Young KS, De Abreu CN. *Internet addiction: a handbook and guide to evaluation and treatment*. John Wiley & Sons; 2011.
25. Maharani, D. A. et al. Mengujikan Internet Addiction Test (IAT) ke Responden Indonesia. *Sekolah Teknik Elektro dan Informatika ITB*. 2018;
26. Kuppens S, Ceulemans E. Parenting Styles: A Closer Look at a Well-Known Concept. *J Child Fam Stud* 2019;28:168-81.
27. Diasokawati I. Pola Asuh; Teknologi; Era Digital. *Bunayya: Jurnal Pendidikan Anak* 2020;5:9-21.
28. Suryana D, Sakti R. Tipe Pola Asuh Orang Tua dan Implikasinya terhadap Kepribadian Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*. 2022;6:4479-92.
29. Neda NPGP, Arsana IWE, Astini DAAAS. Hubungan Pola Asuh Orang Tua dengan Kematangan Emosi Pada Remaja Kelas III di SMP Negeri 1 Kuta Badung Bali. *AMJ* 2022;1:13-9.
30. Widiastuti N, Elshap DS. Pola Asuh Orang Tua Sebagai Upaya Menumbuhkan Sikap Tanggung Jawab pada Anak Dalam Menggunakan Teknologi Komunikasi. *Jurnal Ilmiah UPT P2M STKIP Siliwangi* 2015;2:148-59.
31. Mutiara H. Hubungan Kecerdasan Emosional dengan Kecanduan Internet Pada Remaja di SMPN 3 2X11 Kayutanam Padang Pariaman Tahun 2022. *Universitas Andalas*. 2022.
32. Kurniawan H, Ningsih YT. Perbedaan Tingkat Kecanduan Games Online pada Remaja Ditinjau dari Pola Asuh Orangtua. *Jurnal Edukasi* 2021;1:52-63.
33. Rammazi MG, Anari AMZ, Dehghan H, Najafi V. Relationship between parenting styles, identity styles and students' internet addiction in Kerman University of Medical Sciences. *Rep Health Care* 2015;1:114-9.
34. Rahma Dewani NV, Kumaidi MA. Hubungan Pola Asuh Orang Tua Dan Kecanduan Game Online Dengan Depresi Pada Remaja Di Masa Pandemi Covid-19. *Universitas Muhammadiyah Surakarta*; 2022.

Non-commercial use only