



The effect of authoritarian parenting style on online game addiction mediated by psychological well-being

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ABSTRACT

Background: Online game addiction among Indonesian adolescents is a growing concern for parents. One contributing factor is the authoritarian parenting style.

Purpose: This study examines the effect of authoritarian parenting on online game addiction, mediated by psychological well-being, based on the I-PACE theory.

Method: Using a quantitative approach, 258 adolescents aged 16 to 20 years throughout Indonesia who actively playing online game were selected through purposive sampling ($M_{age} = 18.74$, $SD_{age} = 1.11$). Data were collected via social media questionnaires. A sample size of 196 people was determined using Gpower. Data analysis employed Hayes' mediation regression using PROCESS in IBM SPSS 25.

Findings: Psychological well-being did not significantly mediate the effect of authoritarian parenting style on online game addiction behavior. Meanwhile, authoritarian parenting to online game addiction shows a positive relationship, $\beta = 0.180$, $t(256) = 2.928$, $p < .05$, 95% CIs [0.042, 0.215]. Authoritarian parenting style can also directly predict psychological well-being, $\beta = -0.314$, $t(256) = -0.528$, $p < .05$, 95% CIs [-0.484, -0.221]. In conclusion, authoritarian parenting directly predicts online game addiction without mediation by psychological well-being.

Implication: Interventions targeting online game addiction should address parenting styles, focusing on parental education to reduce adolescents' excessive gaming behavior.

KEYWORDS

authoritarian; game addiction; psychological well-being

Introduction

The dynamic nature of the regional market and the attention from governing states have positioned Asia-Pacific, particularly East and Southeast Asia, as prominent areas in the global gaming landscape. The regions have built their reputation by actively participating in the design, processing, and distribution of digital products, making them significant contributors to the global gaming industry (Anh, 2021). As of 2022, Indonesia dominates the global online gaming industry market with a majority of Indonesian players engaging in mobile and PC gaming (Dihni, 2022). Despite its substantial growth, excessive gaming can lead to problematic internet use (PIU). Numerous cases of PIU in Indonesia indicate an increase in online gaming addiction behavior (Hwang & Toma, 2021; Novrialdy et al., 2019). Internet Gaming Disorder (IGD) has garnered significant attention within the field of psychology, particularly in Indonesia. IGD encompasses various criteria such as excessive use, withdrawal symptoms, and negative impacts on personal and social life. Recent studies highlight the prevalence and risk factors associated with IGD among Indonesian youths. A Latent Class Analysis (LCA) revealed three distinct groups of gamers, with the high-risk IGD group conforming to an IGD prevalence estimate of 1.90%. The criteria of continuation and negative consequences were most informative for identifying high-risk individuals. Consistent with prior research, the deception and escape domains were less

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prominent. Additionally, there is evidence of a strong association between IGD and factors such as male sex and increased gaming duration during both weekdays and weekends, underscoring the multifaceted nature of this disorder (Anh, 2021; Siste et al., 2020).

In DSM-V, online gaming addiction is described as Internet Gaming Disorder, characterized by excessive and prolonged online gaming leading to various cognitive and behavioral symptoms. Some symptoms of online gaming addiction include excessive engagement, withdrawal symptoms, the need to spend more time gaming, failure to control participation, among others (Lolk, 2013). Excessive internet usage can have serious impacts that disrupt or even threaten daily life, particularly for online gamers, such as physical imbalance, interpersonal issues, and poor academic performance, leading to problematic internet use (PIU) behaviors (Hwang & Toma, 2021; Novrialdy et al., 2019).

In relation to online gaming, parental support can reduce the likelihood of adolescents becoming addicted to online games, as supportive parenting fosters better emotional regulation and coping skills, while authoritarian parenting, characterized by strict rules and low emotional warmth, may drive adolescents to seek solace and validation in online gaming, increasing the risk of addiction. Conversely, less supportive parenting styles, such as authoritarian parenting, contribute to adolescent online gaming addiction issues (Hwang & Toma, 2021; Yosephine & Lesmana, 2020).

There are four parenting styles: authoritative, authoritarian, permissive, and uninvolved. The authoritarian parenting style, characterized by strict rules and enforcement, has been empirically linked to a significant tendency towards online gaming addiction (Yosephine & Lesmana, 2020). This is further supported by a study conducted by Siste et al. (2020), which indicates that authoritarian parenting contributes to the likelihood of online gaming addiction tendencies because authoritarian parenting with its strict rules and lack of emotional support can lead children to seek comfort and validation in online gaming, increasing the risk of addiction. Teenagers may use online gaming as a coping mechanism for the stress and lack of warmth associated with authoritarian parenting. The structured reward system in online games can provide a sense of achievement and social interaction that these adolescents might find lacking in their home environment, thus heightening their vulnerability to gaming addiction. This complex interplay between the need for emotional support and the escape offered by online gaming underscores the significant impact of authoritarian parenting on the development of addictive behaviors (Schiebener & Brand, 2017). Thus, the authoritarian parenting style emerges as a crucial parental influence affecting problematic internet use behavior, particularly online gaming addiction among adolescents. The impact of authoritarian parenting includes frequent mood changes in adolescents, below-average cognitive and social abilities, and average academic and social performance (Shaffer & Kipp, 2010).

Parenting styles profoundly influence adolescent development, with varying impacts on behavioral and psychological outcomes. Among the recognized styles—authoritative, authoritarian, permissive, and uninvolved—the authoritarian style is particularly noteworthy for its stringent enforcement and strict rule-setting. This style has been empirically linked to a range of negative outcomes, including a pronounced propensity toward online gaming addiction. This connection is robustly supported by studies which illustrate that authoritarian parenting significantly elevates the risk of such addictions (Siste et al., 2020; Yosephine & Lesmana, 2020). These addictions are associated with broader developmental impacts, including mood instability, suboptimal cognitive and social skills, and average academic performance (Shaffer & Kipp, 2010).

Furthermore, psychological well-being, which encompasses elements like self-acceptance, autonomy, environmental mastery, purpose in life, and personal growth, plays a critical role in adolescent development. The parent-child relationship, influenced heavily by parenting style, is a significant determinant of these well-being facets. Research, including that by Francis et al. (2021), suggests that psychological well-being is affected by various factors including age, gender,

socio-economic differences, and critically, parenting styles. Enhanced psychological well-being has been shown to potentially reduce tendencies toward addictive behaviors such as online gaming, as evidenced by the findings of Afriwilda and Mulawarman (2021) and Hwang and Toma (2021).

The assumed relationship between the variables of authoritarian parenting, online gaming addiction, and psychological well-being can be explained by the I-PACE (Interaction of Person-Affect-Cognition-Execution) theory developed by (Brand, Wegmann, et al., 2019). I-PACE is a theoretical framework that explains the processes underlying the development and maintenance of addiction to specific applications or internet sites, encompassing predisposing variables, affective and cognitive responses to internal or external stimuli, decision-making behavior resulting in the use of specific internet applications, and consequences of using those applications or websites (Brand, Wegmann, et al., 2019).

Drawing from the research discussed, it becomes evident that authoritarian parenting, with its stringent enforcement and strict rule-setting, is associated with an increased likelihood of online gaming addiction among adolescents. This correlation is supported by studies, such as those by Yosephine and Lesmana (2020) and Siste et al. (2020), which have empirically linked restrictive parenting styles to a higher incidence of addictive behaviors. Additionally, such parenting has been found to adversely affect the psychological well-being of adolescents, leading to mood instability, diminished cognitive and social skills, and merely average academic performance as shown by Shaffer and Kipp (2010). Given these findings, psychological well-being emerges not only as a consequence of authoritarian parenting but also as a potential moderator that might influence the severity and manifestation of online gaming addiction. The I-PACE model by (Brand, Wegmann, et al., 2019) further underscores the importance of considering affective and cognitive responses—facets of psychological well-being—as mediating factors in the development of addiction. Therefore, this study aims to conduct a detailed investigation into the mediating role of psychological well-being, assessing whether it can act as a buffer mitigating the negative impacts of authoritarian parenting on adolescent gaming behavior. This exploration is crucial, as it will provide deeper insights into how parenting styles interplay with individual psychological characteristics to influence addictive.

The formulation of the research hypotheses for this study is deeply rooted in the theoretical and empirical insights gained from previous research on the interplay between parenting styles, psychological well-being, and behavioral outcomes in adolescents. The major hypothesis posits that psychological well-being acts as a negative mediator in the relationship between authoritarian parenting and online gaming addiction, leveraging the I-PACE models framework (Brand, Wegmann, et al., 2019) to explore how well-being might buffer the effects of stringent parental control by modulating emotional and cognitive responses, thereby reducing the propensity for addictive behaviors. In support of this, Jhone et al. (2021) further elucidated that adverse childhood experiences contribute to the development of internet gaming disorder, and this relationship is mediated by stress-related support mechanisms, indicating how early life challenges can exacerbate vulnerability to addictive behaviors through psychological stress pathways.

This study specifically aims to investigate how authoritarian parenting influences online gaming addiction, with psychological well-being as a mediating factor. The research seeks to determine whether higher levels of psychological well-being can reduce the negative impact of authoritarian parenting on gaming addiction among adolescents. By using the I-PACE model, this study explores how emotional and cognitive responses might modulate the effects of strict parental control, potentially buffering adolescents from developing addictive behaviors related to online gaming.

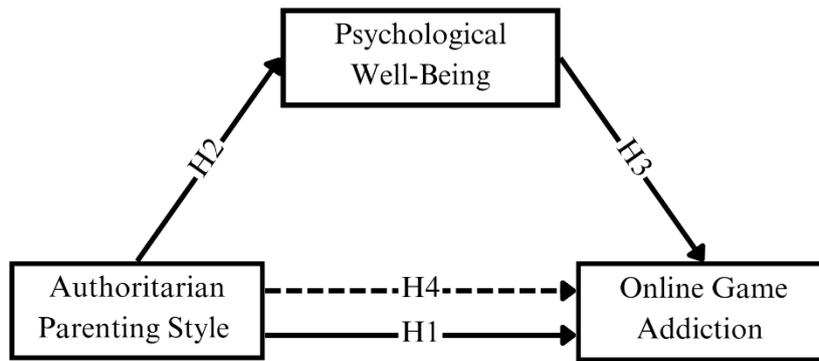


Figure 1. Mediation Analysis Authoritarian Parenting on Game Addiction Through Psychological Well-being

In addition to the major hypothesis, three minor hypotheses are proposed to dissect further the dynamics at play: Authoritarian parents who tend to interfere excessively in controlling children’s lives can make them reluctant to obey and children will play games to seek comfort in response (Bao et al., 2024). However, the regulation of high-intensity or even violent online games often triggers a mentality in children, potentially stimulating children to extend their gameplaying time (Bao et al., 2024). Based on these observations, the Authors hypothesize (H1) that authoritarian parenting style positively affects online gaming addiction.

The I-PACE theory explains that the interaction between negative effects (Affect), such as stress and anxiety, and weakened executive control (Execution) due to authoritarian parenting increases the likelihood of adolescents in developing online gaming addiction. Personally (Person), adolescents shaped by authoritarian parenting are more prone to seek escape from excessive control and pressure. Emotionally (Affect), the negative emotions stemming from authoritarian parenting drive adolescents to use online games to cope. Cognitively (Cognition), these adolescents might believe that online gaming is the only way to achieve a sense of control of freedom, reinforcing excessive gaming behaviour. Additionally, the lack of development in executive skills (Execution) reduces their ability to regulate their gaming time.

Authoritarian parenting exerts a major influence on children’s psychological well-being, where parents who adopt an authoritarian parenting style are associated with negative developmental outcomes such as higher stress levels, lower self-esteem, and the development of avoidant coping strategies (Francis et al., 2021). Thus, authoritarian parenting predicts low psychological well-being scores (Jamir & Borooah, 2019). The negative effects of this parenting style can be explained by the strict rules that parents impose to control their children (Francis et al., 2021). This observation will be this research’s second hypothesis (H2), which we state as Authoritarian parenting style negatively affects psychological well-being.

According to the I-PACE theory, these factors negatively affect adolescent’s psychological well-being, increasing levels of stress, anxiety, and depression. Personally (Person), this parenting style fosters unhealthy characteristics, such as low self-esteem and over-reliance on authority. Emotionally (Affect), the increased stress and negative affect lead to a decline in psychological well-being. Cognitively (Cognition), adolescents under authoritarian parenting may develop beliefs that they lack control over their lives, further worsening their psychological well-being.

Having good psychological well-being can reduce the negative impact of internet use, especially online game addiction, so psychological well-being is needed by adolescents in their development process (Afriwilda & Mulawarman, 2021). Because when adolescents experience poor psychological well-being, this can influence them to play without control which can lead to compulsive gaming or addiction (Kochuchakkalackal & Reyes, 2019). Thus, Authors hypothesize (H3) that psychological well-being negatively affects online gaming addiction.

Poor psychological well-being makes individuals more susceptible to addictive behaviors due to a lack of healthy coping mechanisms. According to the I-PACE theory, negative emotions (Affect), such as depression and anxiety, indicative of poor psychological well-being, drive individuals to seek escape through online gaming to feel better. Cognitively (Cognition), individuals with low psychological well-being may hold beliefs and attitudes that support using online gaming as a way to manage their negative feelings. Moreover, poor psychological well-being can impair their executive functions (Execution), making it harder for them to control their gaming impulses and limit the time spent on online games. According to Bao et al. (2024) children who are addicted to online games come from a poor or non-adaptive home environment that contains conditions that cause psychological well-being problems such as stress and pressure. A non-adaptive home environment can come from authoritarian parenting. Where parents who adopt authoritarian parenting tend to apply coercive power (Bao et al., 2024). This makes even though children submit to their parents' power, their inner feelings are filled with dissatisfaction and disappointment. In the end, they vent through online games, seek attention from friends, and find excitement so as to alleviate unpleasant experiences at home (Bao et al., 2024). This leads to our hypothesis (H4) that psychological well-being serves as a negative mediator in the relationship between authoritarian parenting and online gaming addiction behavior.

If discussed using the I-PACE theory, authoritarian parenting shapes personal characteristics (Person), such as low self-esteem and high dependency on others. This parenting style induces stress, anxiety, and other negative emotions (Affect) in adolescent, diminishing their psychological well-being. As a result, adolescent may seek escape in online games to cope with these negative emotions. Cognitively (Cognition), adolescent with poor psychological well-being may develop the belief that online gaming is the only way to feel better or gain control over their lives. Additionally, diminished psychological well-being can impair their ability to control impulses (Execution), including excessive gaming.

Method

Participants and Procedure

This research employs a quantitative method. The study consists of three variables: the criteria variable (online gaming addiction), the predictor variable (authoritarian parenting), and the mediating variable (psychological well-being). The research subjects are adolescents aged 16-20 from all regions of Indonesia who actively engage in online gaming.

The research begins with preparing measurement instruments, conducting instrument trials, expert judgments, data collection, and data analysis. After preparing the measurement instruments, a measurement trial is conducted with criteria being adolescents aged 16-20 actively playing online games in Banjarbaru City, South Kalimantan. The research sample was drawn from the city of Banjarbaru because according to statistical data from Open Signal as of February 2020, this city ranked 12th out of 44 cities in Indonesia in terms of the number of online gamers, with a substantial proportion of around 67.1%. It falls into the "fair" category, indicating a significant number of online gaming users, thus considered sufficiently representative for the teenage population in Indonesia actively engaged in online gaming. In the trial process, a sample of 40 individuals is obtained, followed by item selection tests and reliability tests of the measurement tool. Subsequently, an expert judgment process is carried out to assess the content and face validity of the measurement tool. After evaluation and improvement based on expert judgment, the data collection process is conducted using Google Forms on several social media platforms (Instagram, Twitter, WhatsApp, & Facebook). From the calculation results of G*Power, the number of samples needed is 196 people. A total of 601 samples are collected. Then, data exclusion is performed on samples that do not meet the age criteria, fail the distractor item test, and are identified as outliers, resulting in a final sample size of 258 individuals for analysis.

Instruments

This study employs 3 measurement instruments to assess each variable. All measurement tools are conducted in the Indonesian language. Operationally, online gaming addiction uses the total score from the Indonesian Online Game Addiction Questionnaire developed by Jap et al. (2013) and modified by researchers, where a higher total score indicates a higher level of individual online gaming addiction, with a Cronbach's $\alpha = .778$. This measurement tool is a self-report consisting of 7 items with a 5-point Likert scale ranging from (1) Never to (5) Very Often. An example item in this measurement tool is "*Seberapa sering Anda bermain game online saat tengah malam?*".

Authoritarian parenting is measured using the Parental Authority Questionnaire (PAQ) developed by Buri (1991) in its original English language, which was later adapted into Indonesian by Preston and Salim (2019) and modified by researchers. The measurement tool indicates each from of parental authority (fathers & mothers) with Cronbach's $\alpha = .772$ for the father's parenting style and $\alpha = .775$ for the mother's parenting style. This measurement tool consists of 7 items for the father's authoritarian parenting style and 8 items for the mother's authoritarian parenting style, with a 5-point Likert scale ranging from (1) Strongly Disagree to (5) Strongly Agree. Respondents are asked to perceive their views on their father's and mother's parenting styles during their childhood. One of the original item statements in the measurement tool is "My mother felt that wise parents should teach their children early just who is boss in the family" and it was adapted into Indonesian by Preston and Salim (2019), resulting in the statement "*Ibu saya merasa bahwa orang tua yang bijaksana harus mengajarkan anak-anak mereka sejak dini siapa yang berkuasa di dalam keluarga*".

Psychological well-being is measured using the Psychological Well-Being Scale (PWB) developed by Ryff and Singer (1996) in its original English language, which was later adapted into Indonesian by Triwahyuni and Prasetyo (2021) and modified by researchers. The measurement tool has a good reliability score with Cronbach's $\alpha = .910$, where a higher total score indicates a higher level of individual psychological well-being. This measurement tool consists of 42 items with 6 dimensions, each dimension comprising of 7 items, with a 6-point Likert scale ranging from (1) Strongly Disagree to (6) Strongly Agree. However, during the research trial ($n = 40$), 11 items are eliminated due to having a coefficient item correlation value $< .25$, resulting in 31 items used for measuring psychological well-being. An example item in this measurement tool is "I have direction and purpose in life."

From the pilot test results of the measurement tool on 40 participants, the item selection results include the following: in the authoritarian fathering style scale, item number 6 was modified because the corrected item-total correlation value was $.268$; in the psychological well-being measurement tool, 11 items were dropped due to corrected item-total correlation values below $.25$ (items number 4, 7, 8, 20, 35, 10, 13, 16, 18, 19, & 36), and 4 items were modified (items number 42, 31, 32, & 39) because the range of corrected item-total correlation values for these items was $> .25$ to $< .30$; and in the online gaming addiction measurement tool, 2 items (number 4 & 7) had corrected item-total correlation values below $.25$ but were retained by modifying the item sentences to still represent the measurement of the online gaming addiction variable.

Data Analysis

From the research data, the subject's response scores from each given measurement tool were obtained, and the research results were further analyzed using IBM SPSS Statistics version 25 for Windows. The initial stage in this data analysis involved conducting classical assumption tests, which included residual normality tests, linearity tests, multicollinearity tests, and heteroscedasticity tests. After performing the classical assumption tests, the data analysis was continued by conducting a mediation model regression test using the PROCESS software in IBM SPSS Statistics version 25 for Windows with Hayes model 4 regression mediation.

Result and Discussion

From the initially gathered 601 respondents, elimination was conducted for subjects not meeting the age criteria, failing the distractor item test, and identified as outliers. The total number of participants after the elimination process was 258 individuals, representing all 21 provinces in Indonesia presented in Table 1. The research subjects were predominantly 20 years old (34.5%), with their highest level of education being high school or equivalent (69%). On average, most research subjects played online games for 2-3 days per week (34.9%) and spent 2-3 hours per day (22.9%). The average monthly expenditure for playing online games ranged from less than Rp100,000 to Rp250,000 (39.5%).

Table 1
Distribution of Respondents Based on Domicile (Province)

Province	<i>f</i>
North Sumatera	4
South Sumatera	2
West Sumatera	6
Bengkulu	2
Riau	6
Lampung	3
Bangka Belitung	1
West Kalimantan	1
South Kalimantan	27
Banten	17
DKI Jakarta	43
West Java	50
Central Java	49
Yogyakarta	36
Bali	2
East Nusa Tenggara	1
West Nusa Tenggara	1
Gorontalo	1
North Sulawesi	1
South Sulawesi	4
Maluku	1
Total	258

Regarding the Father figure, the subjects were mainly those whose fathers had completed a diploma (D3) or bachelor's (S1) degree (47.7%) and were predominantly fathers working as entrepreneurs (56.2%). All subjects had a biological father (100%). In the Mother figure, the subjects were mainly those whose mothers had completed a diploma (D3) or bachelor's (S1) degree (48.8%) and were dominated by mothers working in fields other than being a housewife, entrepreneur, state-owned enterprise (BUMN) employee, or in the military/police (44.2%). Additionally, most subjects had a biological mother (99.2%). The parents' characteristic in the study population is presented in Table 2.

Table 2*Demographic Characteristics of Parents in The Study Population*

		<i>f</i>	<i>%</i>	<i>M</i>	<i>SD</i>
Father's education	Up to high school	88	34.1	1.84	9.67
	Diploma 3 and bachelor's degree	123	47.7	2.19	9.42
	Above bachelor's degree	47	18.2	2.53	9.89
Mother's education	Up to high school	112	43.4	1.89	1.32
	Diploma 3 and bachelor's degree	126	48.8	2.11	1.38
	Above bachelor's degree	20	7.8	2.80	1.55
Father's occupation	Civil servant (ASN)	31	12.0	3.45	1.72
	Military / police	11	4.3	3.27	1.49
	State-Owned Enterprises (BUMN)	22	8.5	3.81	1.63
	Entrepreneur / self-employed	145	56.2	3.18	1.86
	Others	49	19.0	3.72	1.57
Mother's occupation	Civil servant (ASN)	32	12.4	3.45	1.66
	Military / police	2	.8	3.00	0.00
	State-Owned Enterprises (BUMN)	5	1.9	3.40	1.14
	Entrepreneur / self-employed	105	40.7	3.16	1.84
	Others	114	44.2	3.53	1.62

After the data was collected, the next step involved data analysis. Data analysis was conducted by performing tests on basic assumptions. The first basic assumption test conducted was the Kolmogorov-Smirnov test for residual normality, indicating that all data followed a normal distribution with a significance value of sig. = .200. Based on the linearity test results, it was found that all data exhibited a linear relationship, with a deviation from linearity > 0.05. In the multicollinearity test results, it was determined that there were no signs of multicollinearity among the variables, as evidenced by all VIF Tolerance values > 0.10. For the heteroscedasticity test, the Glejser Test was conducted, and the results indicated that there was no heteroscedasticity in the entire dataset, with significance values > .05.

After confirming that the basic assumptions were met, the hypothesis test was conducted using the regression mediation model with the PROCESS technique in IBM SPSS version 25 for Windows, utilizing the Hayes Model 4, bootstrapping 1000, with a total sample of 258 individuals. Based on the results of the Hayes Model 4 mediation regression analysis, the findings are presented in Table 3 and Figure 2.

Table 3

Mediation Analysis of Authoritarian Parenting on Game Addiction Through Psychological Well-being

Path	β	$t(256)$	p	95% CI
Path A (Effect on Well-being)	-0.314	-0.528	< .05	[-0.484, -0.221]
Path B (Effect of Well-Being on Game Addiction)	-0.214	-1.882	> .05	[-0.157, 0.004]
Path C'' (Direct Effect on Game Addiction)	0.180	2.928	< .05	[0.042, 0.215]
Indirect Effect (A x B)	0.038	--	--	[-0.003, 0.090]
Total Effect	0.128	2.928	NS	[0.042, 0.215]

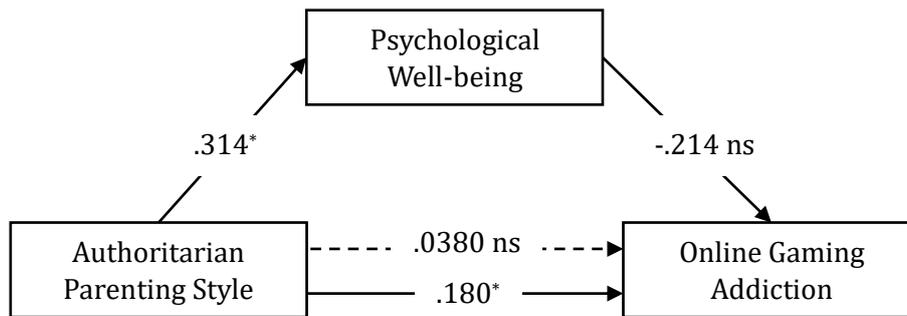


Figure 2. *Mediation Analysis of Authoritarian Parenting on Game Addiction Through Psychological Well-being*

H1 in this research is that authoritarian parenting style has a positive effect on online game addiction. It was found that authoritarian parenting positively predicts online gaming addiction with statistically significant result, $\beta = 0.1800$, $t(256) = 2.9282$, $p < .05$, 95% CI [0.0422, 0.2153]. Furthermore, 3% of the variance in online gaming addiction is explained by the predictor, $F(1, 256) = 8.5745$, $p < .001$, $R^2 = .0324$. This means that the more authoritarian the parenting style, the greater the potential for online gaming addiction behavior in adolescents. This aligns with Siste et al. (2020), who explain that authoritarian parenting can influence online gaming addiction behavior in adolescents. Similarly, a study by Yosephine and Lesmana (2020) found that authoritarian parenting significantly influences the tendency for online game addiction. This is consistent with the I-PACE theory in the A (affective) and C (cognitive) components, which explains that situational factors from authoritarian parenting tend to be subjectively evaluated by individuals and cause an increase in individual stress, influencing individuals to use the internet as a coping mechanism for stress and continuing with the conditioning process. This becomes a cause of the tendency for online gaming addiction in adolescents (Brand, Wegmann, et al., 2019).

H2 in this research is that the authoritarian parenting style negatively affects psychological well-being. Based on the analysis results, it was found that authoritarian parenting is able to predict psychological well-being, $\beta = -0.314$, $t(256) = -0.52835$, $p < .05$, 95% CI [-0.4844, -0.2214]. Furthermore, 9% of the variance in psychological well-being is explained by the authoritarian parenting style as the predictor, $F(1, 256) = 27.9154$, $p < .001$, $R^2 = .0983$. This implies that the more authoritarian the parenting style, the lower the level of psychological well-being in adolescents. The findings of this study are consistent with Chen et al. (2019), who explain that parents who raise their children in an authoritarian manner can impact the condition of psychological well-being, and Francis et al. (2021), who explain that the psychological well-being of adolescents can decline due to authoritarian parenting styles. This is also aligned with the I-

PACE theory in the P (Person) component, which explains past experiences as predisposing factors, such as the form of authoritarian parenting shaping the current selves of adolescents, resulting in adolescents experiencing low level of social support and psychological resources (Brand, Wegmann, et al., 2019; Hwang & Toma, 2021; Shaffer & Kipp, 2010).

H3 in this research is that psychological well-being negatively affects online gaming addiction. The findings suggest that psychological well-being does not significantly influence the likelihood of online gaming addiction, as indicated by the statistical results, $\beta = -0.2144$, $t(256) = -1.8821$, $p > 0.05$, 95% CI [-0.1577, 0.0036]. This analysis demonstrates that the level of psychological well-being in adolescents—whether high or low—does not reliably predict their propensity to develop online gaming addiction. This outcome aligns with the conclusions drawn by Nurmaria and Risnawati (2021), who found no direct correlation between internet addiction and psychological well-being among adolescents.

Nurmaria and Risnawati's research further explains that adolescents may increasingly turn to online gaming as they experience loneliness, using gaming as a strategy to alleviate these feelings. As adolescents engage more in online gaming environments, they often establish and maintain social connections with other gamers. These interactions can provide significant emotional support, leading to feelings of happiness and fulfillment from being part of a community, which addresses their need for social engagement and positive relationships.

Thus, while online gaming addiction is generally viewed negatively due to its potential impacts on various aspects of life, such as academic performance and physical health, it can concurrently contribute positively to an adolescent's psychological well-being by enhancing their social life. This dual effect suggests a complex relationship where the social benefits gained from online gaming can somewhat mitigate the negative psychological impacts typically associated with addiction. It is crucial, therefore, to recognize that the influence of online gaming on psychological well-being encompasses both potential harms and benefits, highlighting the importance of considering these nuances when addressing adolescent gaming behaviors in clinical and educational settings.

The I-PACE model, which stands for Interaction of Person-Affect-Cognition-Execution, offers a framework for understanding how specific environmental and personal factors lead to addictive behaviors, including online gaming (Brand, Wegmann, et al., 2019). In this context, authoritarian parenting, characterized by strict rules and high expectations, can induce significant stress in adolescents, triggering affective and cognitive responses that drive them to seek relief through online gaming. This activity provides an escape from real-world pressures and engages rewarding cognitive processes, aligning with the A and C components of the I-PACE model (Billieux et al., 2020; Wegmann & Brand, 2019). Moreover, the cultural backdrop of this study's predominantly Javanese participants add another dimension. In Javanese culture, where there is a strong emphasis on etiquette, respect, and obedience to parents, the pressure to conform can increase psychological stress (Wegmann & Brand, 2019). Consequently, online gaming serves not only as a leisure activity but also as a significant social outlet where adolescents can achieve recognition and express themselves away from the stringent oversight of family life. The virtual world offers them a realm for achieving status and interacting with peers, which, while part of an addictive framework, also supports their psychological well-being by providing meaningful social connections. This complex interplay of cultural factors, parenting styles, and psychological processes underlines the need for a nuanced approach in understanding online gaming addiction among adolescents, particularly within specific cultural contexts like Java (Anh, 2021; Brand, Rumpf, et al., 2019; Brand, Wegmann, et al., 2019; Schiebener & Brand, 2017; Wegmann & Brand, 2019).

H4 in this research is that psychological well-being negatively mediates the role of authoritarian parenting and online gaming addiction. In the mediation analysis, the results indicate that psychological well-being does not significantly mediate the role of authoritarian

parenting on online gaming addiction ($\beta = 0.0380$, $\text{BootSE} = 0.0243$, 95% $\text{BootCI} [-0.0034, 0.0904]$). This means that in this study, the psychological well-being variable cannot mediate the influence of authoritarian parenting on online gaming addiction. However, as stated in the first and second hypotheses, authoritarian parenting directly affects both psychological well-being and online gaming addiction. Nevertheless, the results of the third hypothesis show that psychological well-being does not significantly influence online gaming addiction. Therefore, if psychological well-being does not significantly directly influence online gaming addiction, it can be concluded that psychological well-being does not play a role as a mediator between authoritarian parenting and online gaming addiction.

From these results, it can be stated that although psychological well-being does not function as a mediator, authoritarian parenting can directly influence online gaming addiction. Several potential factors explain these findings. First, this finding does not fully confirm the I-PACE theory, which explains psychological well-being as a mediator between authoritarian parenting and online gaming addiction. Permatasari and Royanto (2023) explain that authoritarian parenting emphasizes discipline and control over children, often leading to efforts to control teenagers' motivation to follow rules. In response, Brand et al. (2016) explained that teenagers play online games as a coping mechanism for the stress of authoritarian parenting, which is considered unpleasant. As a result, this parenting style increases high sensitivity to control and external rewards because they tend to receive punishment from parents (Yosephine & Lesmana, 2020). This is related to teenagers' motivation to play online games. Many teenagers decide to play online games due to intrinsic motivations such as achievement, happiness, social relationships, and challenges. Driven by the structured reward system in online games, teenagers who play online games may not aim to use them as a coping mechanism for authoritarian parenting stress but rather to gain intrinsic rewards like happiness and social interaction compared to compensating for low psychological well-being. Therefore, there is a stronger direct influence between authoritarian parenting and online gaming addiction compared to through psychological well-being (Yee, 2006; Yosephine & Lesmana, 2020).

Furthermore, I-PACE model is a general approach to explaining the process of addictive behavior and does not determine the role and place for each specific cognitive (component C) or affective (component A) process. This means that the role of each component may not follow a general sequence from affective and cognitive processes, making it possible for psychological well-being to act as both a predictor and a criterion within the I-PACE model to explain tendencies toward gaming addiction and authoritarian parenting (Brand, Wegmann, et al., 2019). Additionally, Jhone et al. (2021) explain that the predisposing factors from the P (person) component are adverse childhood experiences such as emotional abuse, physical abuse, physical and emotional neglect, war, sexual violence, and others that cause severe stress during adolescence. Therefore, it is possible that authoritarian parenting as a predisposing factor does not cause stress during adolescence, allowing teenagers to maintain good psychological well-being. This aligns with the research by Permatasari and Royanto (2023), which explains that teenagers with authoritarian parenting tend to control their ego, behave well, have positive emotions, and cognitively strive to understand what they need to understand well. Therefore, it is possible that teenagers with authoritarian parenting may not experience severe stress driving low psychological well-being but instead have good psychological well-being in several dimensions.

Furthermore, the insignificance of psychological well-being as a mediator may be due to other factors such as the dimensions of psychological well-being itself. Shaffer and Kipp (2010) explain that the 6 dimensions of psychological well-being are multidimensional, meaning each dimension can be analyzed separately. Statistically, psychological well-being cannot mediate the role of authoritarian parenting on online gaming addiction if measured unidimensionally, potentially mediating if measured multidimensionally. Christianti (2016) explains that out of the

6 dimensions of psychological well-being in teenagers addicted to online games, only 1 dimension, self-acceptance, is considered low. This means that teenagers experiencing online gaming addiction may still have good psychological well-being levels when viewed per dimension.

In this study, psychological well-being was measured unidimensionally, not by separate dimensions. Therefore, specific relevant dimensions, such as self-acceptance, may have been obscured or not detected in analysis, leading to the finding that psychological well-being did not act as a significant mediator. The insignificance of this hypothesis could be explained by the multidimensional nature of psychological well-being. Measuring psychological well-being as a whole may not capture the subtle effects that each dimension could have on online gaming addiction. As Shaffer and Kipp (2010) pointed out, each dimension might have a different impact on gaming addiction, so a more detailed approach to measuring these dimensions might have produced more significant results. Since this study did not employ a multidimensional approach, the potential mediation effect of specific dimensions, such as self-acceptance, could not be further explored. This could be one reason why psychological well-being did not emerge as a mediator in the relationship between authoritarian parenting and online gaming addiction.

Conclusion

The final conclusion drawn from the research findings is that authoritarian parenting can directly predict psychological well-being, and authoritarian parenting can also directly predict online gaming addiction without going through a mediator. Adolescents with authoritarian parenting styles may be prone to online gaming addiction without being influenced by psychological well-being, and adolescents with authoritarian parenting styles tend to have lower levels of psychological well-being. Some recommendations from this study include suggesting future researchers expand the data distribution to obtain a representative sample from each province in Indonesia. Additionally, future researchers are advised to analyze the influence of demographic data on research variables and investigate each dimension of psychological well-being separately as a mediator to obtain more detailed results.

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