Parenting Styles And Their Impact On Online Gaming Addiction: Mediating Role Of Psychological Well-Being In Indonesia

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Abstract. In Indonesia's distinctive cultural and digital milieu, this study explores the interconnectedness between parenting styles, psychological well-being, and online game addiction in individuals aged 15-30. Utilizing digital outreach on platforms such as Instagram, Twitter, and Facebook, data was sourced from 601 participants. The Indonesian Online Game Addiction Questionnaire, the Parental Authority Questionnaire (PAQ), and Triwahyuni and Prasetyo's 42-item scale for psychological health were the primary measurement tools. Findings underscore an inverse relationship between both paternal and maternal parenting styles and psychological health. Furthermore, psychological well-being serves as a critical mediator in the relationship between parenting styles and online gaming habits. The insights offer significant implications for parenting, psychological health, and digital gaming behaviors in the contemporary Indonesian context, suggesting a need for harmonized approaches that seamlessly blend tradition and modern challenges.

1 INTRODUCTION

The digital landscape of the modern era showcases Indonesia's commendable stride in online gaming. As reported in January 2022, 94.5% of Indonesian internet users between the ages of 16 and 64 are engrossed in online gaming, positioning Indonesia as the third-largest player base worldwide, only surpassed by the Philippines and Thailand [1]. Reports indicate that of Indonesia's 105 million online gamers, roughly 52 million are regular players, with an alarming 62% dedicating 1-3 hours daily, implying an emerging pattern of potentially obsessive gaming behaviours [2]. This surge in online gaming, while serving as a source of entertainment and fostering connections, also raises concerns about online gaming addiction. In shaping an adolescent's psychological well-being, the essence of family, especially parenting style, is paramount. The depth of the parent-child bond significantly influences how young individuals address the various psychological hurdles during their formative years. Studies indicate that children nurtured with understanding yet assertive parental guidance exhibit enhanced psychological stability and resilience [3]. Conversely, children subjected to an authoritarian parenting approach often encounter challenges to their psychological well-being, potentially leading to mental health issues [3,4].
This influence of parenting doesn't merely resonate within the family confines. On a broader scale, parenting styles have both direct and indirect implications on susceptibility to influences, such as online gaming addiction. Families that consistently offer positive parenting bolster an individual's psychological defence mechanisms [5]. Nevertheless, the efficacy of these defences often hinges on the parenting style's nature [6]. Those with fortified psychological well-being, achieved through a nurturing household, manifest improved cognitive adaptability. Such attributes facilitate superior emotional management, thus reducing the appeal of addictive behaviours, including online gaming [7]. Further underscoring this relationship's intricacy, a study by Afriwilda [8] revealed an inverse correlation between levels of psychological well-being and online gaming addiction severity. It's evident that individuals with robust psychological well-being, nurtured by appropriate parenting, are better prepared to face daily adversities without seeking solace in online gaming. Conversely, unchecked involvement in online gaming may indicate underlying challenges, underlining its detrimental effects on psychological health [9].

Considering these complex interplays and their broader societal ramifications, our research aims to elucidate the tripartite relationship among parenting styles, psychological well-being, and the escalating issue of online gaming addiction within the Indonesian context. Indonesia's contemporary societal intricacies, amalgamated with the omnipresence of digital avenues, have birthed multifarious interplays between online gaming, psychological well-being, and parenting techniques. Acknowledging the deep-rooted repercussions of these interactions, this research seeks to shed light on the triadic linkage, particularly highlighting differences in maternal versus paternal impacts. Fundamental to our exploration, we put forth two primary hypotheses: We posit that psychological well-being might serve as a bridge between maternal parenting approaches and online gaming addiction in adolescents. Similarly, for paternal influences, our proposition aligns with the maternal conjecture, envisioning psychological well-being as a potential bridge linking paternal parenting methods and online gaming addiction.

Stemming from these primary postulations, our study further explores specific hypotheses. For maternal aspects, we inquire if parenting styles significantly affect an adolescent's psychological well-being and consequently their propensity for online gaming addiction. In the realm of paternal influences, we seek answers to similar inquiries, gauging the impact of fatherly interactions on adolescent psychological health and their tendencies toward the virtual gaming universe. Central to these hypotheses is the overarching notion of whether robust psychological well-being serves as a protective layer, potentially dampening the allure of online gaming across diverse parenting styles.

2 METHODS

In the quest to decode the underlying relationships between parenting styles, psychological well-being, and online game addiction, a quantitative approach was meticulously adopted. A demographic spectrum was targeted, spanning early teenagers aged 15 right up to mature adults of age 30. The omnipresence of contemporary digital avenues facilitated a data collection strategy that hinged on prominent social media platforms, including Instagram, Twitter, and Facebook. This outreach strategy bore fruit, amassing data from a commendable 601 participants.

To appropriately measure the intensity of online gaming addiction among our cohort, the Indonesian Online Game Addiction Questionnaire was employed [10]. This instrument, with its structure allowing a score's rise to correspond with increasing addiction severity, furnished a gradient perspective on online gaming behaviors.

To discern participants' perception of parental guidance, the Parental Authority Questionnaire (PAQ) was pivotal. Rooted in Buri's foundational work from 1991 [11], this instrument
underwent subsequent adaptations to fit the Indonesian socio-cultural milieu, a feat achieved by Preston and Salim in 2019 [12]. The 41-item questionnaire dissects both maternal and paternal parenting dynamics, with responses recorded on a nuanced 5-point Likert scale. To holistically gauge participants' psychological health, the exhaustive scale by Triwahyuni and Prasetyo, which encompasses six cardinal dimensions of well-being, was indispensable [13]. Each of its 42 items was evaluated on a scale ranging from 1-6.

The analytical cornerstone of this research was the regression mediation analysis, executed using the PROCESS macro as delineated in Hayes' Model 4. Renowned for its prowess in demystifying both overt and intricate indirect effects, this method was further bolstered by employing a bootstrapping technique, anchored on a sample size of 1000, to attain unparalleled analytical accuracy.

Affirming the reliability of the chosen instruments was a task undertaken with Cronbach's alpha. The values stood testament to their robustness: 0.73 for the online game addiction scale [10], 0.679 and 0.863 for the maternal and paternal sections of PAQ respectively [12], and a remarkable 0.933 for the well-being scale [13]. These scores augmented the trust in the conclusions drawn from the study.

3 RESULT AND DISCUSSION

3.1 Descriptive Statistic

Table 1 provides an overview of the descriptive statistics for the variables considered in the study. The variables include paternal and maternal parenting styles (PS_F and PS_M, respectively), psychological well-being (PWB), online gaming addiction (OGA), and other demographic and gaming related variables. The table illustrates the sample size, minimum and maximum scores, mean, and standard deviation for each variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS_F</td>
<td>14</td>
<td>84</td>
<td>59.95</td>
<td>13,190</td>
</tr>
<tr>
<td>PS_M</td>
<td>24</td>
<td>84</td>
<td>63.66</td>
<td>11,418</td>
</tr>
<tr>
<td>PWB</td>
<td>43</td>
<td>139</td>
<td>95.44</td>
<td>11,653</td>
</tr>
<tr>
<td>OGA</td>
<td>7</td>
<td>41</td>
<td>22.91</td>
<td>6,233</td>
</tr>
<tr>
<td>Age</td>
<td>15</td>
<td>30</td>
<td>21.45</td>
<td>3,539</td>
</tr>
</tbody>
</table>

In the digitally evolving landscape of the 21st century, online gaming has become an omnipresent leisure activity among the global youth. While gaming, in general, has been proven to offer a plethora of cognitive benefits [14], the line between moderate engagement and addiction is thin. This is exacerbated when psychological well-being is compromised due to external or internal factors, and the very environment in which an individual grows can play a pivotal role. Our quantitative study aimed to untangle this intricate relationship between parenting styles, psychological well-being, and online game addiction among Indonesian individuals aged 15-30.

3.2 Paternal Influence

Starting with the impact of paternal influence, our results depict a complex web of relationships, as outlined in Table 2 and illustrated in Figure 1. A clear negative relationship
is observed between paternal parenting styles and psychological well-being ($\beta = 0.1099$, $p < 0.05$). This trend is consistent with the findings of Przybylski et al. [15], suggesting that strict paternal approaches can weaken the emotional resilience of offspring, notably in technologically-oriented environments. Such patterns can be traced back to traditional paternal roles, deeply rooted in cultural foundations, which prioritize discipline and structure at the expense of open emotional communication [16].

Table 2. Mediation Analysis of Paternal Influence on Online Game Addiction through Psychological Well-being.

<table>
<thead>
<tr>
<th>Path</th>
<th>Coefficient ($\beta$)</th>
<th>t(509)</th>
<th>p-value</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A (Effect on Well-being)</td>
<td>0.1099</td>
<td>-2.4898</td>
<td>&lt;0.05</td>
<td>[-0.1810, -0.0202]</td>
</tr>
<tr>
<td>Path B (Effect of Well-being on Game Addiction)</td>
<td>-0.2144</td>
<td>-4.9201</td>
<td>&lt;0.001</td>
<td>[-0.1663, -0.714]</td>
</tr>
<tr>
<td>Path C' (Direct Effect on Game Addiction)</td>
<td>-0.0957</td>
<td>-4.9201</td>
<td>&lt;0.001</td>
<td>[-0.0874, -0.0049]</td>
</tr>
<tr>
<td>Indirect Effect (A x B)</td>
<td>0.0235</td>
<td>---</td>
<td>---</td>
<td>[0.0201, 0.0689]</td>
</tr>
<tr>
<td>Total Effect</td>
<td>0.721</td>
<td>-1.6287</td>
<td>NS</td>
<td>[-0.0767, 0.0072]</td>
</tr>
</tbody>
</table>

Note: NS = Not Significant

Delving deeper into the relationship between psychological well-being and online gaming behaviors, we observed a distinct negative correlation between them, evidenced by a coefficient of $\beta = -0.2144$ ($p < 0.001$). This trend aligns with the findings of Anderson et al. [17], who argue that online platforms can often act as digital sanctuaries for younger individuals grappling with emotional challenges. Their findings underscore the critical importance of nurturing mental health, especially when considering our target demographic transitioning from adolescence to adulthood.

Fig. 1. Mediation Analysis of Paternal Influence on Online Game Addiction through Psychological Well-being

3.3 Maternal Influence

Shifting our focus to maternal influences, the results presented in Table 3 and illustrated in Figure 2 offer a captivating story. There's a consistent inverse relationship between the role
of mothers and psychological well-being, signified by $\beta = 0.2033$ ($p < 0.001$). This aligns with the findings of Leung Ling, Chen, and Chiu [18,19], emphasizing the paramount role of maternal engagements in shaping the emotional health of offspring, especially in Asian cultures where mothers serve as the emotional anchor of families. The profound impact can be traced back to the intrinsic nurturing nature traditionally associated with mothers, with any divergence from this approach leaving lasting effects on an individual's mental well-being.

$$\beta = 0.2033 \quad \text{Psychological well being} \quad \beta = -0.2165$$

Maternal style

Online Game Addiction

C' = NS

Fig. 2. Mediation Analysis of Maternal Influence on Online Game Addiction through Psychological Well-being

Table 3. Mediation Analysis of Maternal Influence on Online Game Addiction through Psychological Well-being.

<table>
<thead>
<tr>
<th>Path</th>
<th>Coefficient ($\beta$)</th>
<th>$t$(509)</th>
<th>p-value</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A (Effect on Well-being)</td>
<td>0.2033</td>
<td>-4.6036</td>
<td>&lt;0.001</td>
<td>[-0.2745, -0.1103]</td>
</tr>
<tr>
<td>Path B (Effect of Well-being on Game Addiction)</td>
<td>-0.2165</td>
<td>-4.8833</td>
<td>&lt;0.001</td>
<td>[-0.1683, -0.0717]</td>
</tr>
<tr>
<td>Path C' (Direct Effect on Game Addiction)</td>
<td>-0.0629</td>
<td>-1.4182</td>
<td>NS</td>
<td>[-0.0798, 0.0129]</td>
</tr>
<tr>
<td>Indirect Effect (A x B)</td>
<td>0.0434</td>
<td>---</td>
<td>---</td>
<td>[0.0201, 0.0689]</td>
</tr>
<tr>
<td>Total Effect</td>
<td>0.0195</td>
<td>-0.4393</td>
<td>NS</td>
<td>[-0.0568, 0.0361]</td>
</tr>
</tbody>
</table>

Note: NS = Not Significant

However, when deciphering the direct association between maternal interactions and online game addiction, the statistical threads become more tenuous. This nuance is reminiscent of the observations by Kuss, Griffiths, and Pontes [20] who hypothesized that the maternal-gaming relationship is potentially convoluted, mediated by multifarious factors, psychological well-being being a paramount one.

Amplifying the robustness of our analytical approach, we harnessed the bootstrapped mediation method, a strategy championed by Hayes [21] for its empirical rigor, which is reflected in our dataset with 1,000 bootstrapped samples. This methodology illuminated significant indirect effects across both paternal and maternal models, crystallizing the crucial
mediating role psychological well-being plays in bridging parenting approaches and online gaming predilections.

Our study, set against the backdrop of Indonesia's rich cultural tapestry, underscores the imperative of adaptive parenting strategies. With traditional intergenerational perspectives often juxtaposing modern-day challenges, especially in the digital domain, it's pivotal to revisit and recalibrate parenting norms to ensure the holistic well-being of the youth. This becomes even more salient when factoring in the rapid proliferation of online games, and the allure they hold.

However, every research landscape is marred by its own set of challenges. Our reliance on self-reported measures could potentially introduce biases [22]. Future endeavours might benefit from juxtaposing such self-reports with more objective measures. Indonesia, with its rich cultural tapestry, could offer deeper insights if future researches account for regional or ethnic variances in parenting styles.

In conclusion, our insights serve as a clarion call to psychologists, educators, parents, and policymakers, emphasizing the interdependence of familial constructs, psychological health, and online gaming behaviors. As we stand on the cusp of a digital era, marked by the meteoric rise of immersive technologies, the findings of our study spotlight the necessity of fostering nurturing home environments, buttressing psychological resilience, and cultivating informed perspectives towards online gaming, making it an enriching experience rather than an escapist vice.

4 CONCLUSION

Our comprehensive exploration into the interplay of parenting styles, psychological well-being, and online gaming habits, especially within the Indonesian demographic, has brought forth noteworthy insights. Concentrating on the age bracket of 15 to 30 years, our research accentuates the profound impact of both paternal and maternal influences on an individual's inclination towards online gaming addiction.

Our findings underscore the perspective that while certain paternal styles might diminish emotional resilience, potentially driving young adults towards digital escapism, maternal influences play an instrumental role in bolstering psychological well-being. These insights bear significant real-world implications, especially set against an Indonesian milieu that seeks a balance between traditional ethos and emerging challenges. This cultural interplay proved indispensable, providing our research with a distinct vantage point seldom highlighted in similar studies.

Staying aligned with internationally accepted norms, our research methodologies, tools, and analytical approaches maintained a high standard of academic rigor. This robust framework not only lends credence to our findings but also welcomes examination and validation from domain experts. By shedding light on the intricate relationships between familial environments, psychological well-being, and online gaming tendencies, our study emphasizes the urgency of adopting evolved parenting paradigms. As the digital age unfolds, understanding these dynamics becomes critical, especially when discerning between gaming as an enriching activity and its potential addiction pitfalls.

In wrapping up, this study offers a resounding endorsement for the pivotal role familial structures play in influencing online gaming behaviours, positioning itself as a key reference for educators, psychologists, and policymakers alike. By integrating stringent academic protocols with the nuances of Indonesia's diverse cultural canvas, we're confident that our research carves out a unique niche in the academic sphere, and we eagerly anticipate its evaluation and discourse within the scholarly community.
The authors wish to express their deepest gratitude to the participants who generously shared their experiences and perspectives, making this study possible. We also extend our sincere appreciation to our peers and mentors for their invaluable feedback and insights throughout the course of this research. Our heartfelt thanks go to the various institutions and platforms that facilitated our data collection, ensuring a wide and diverse pool of respondents. Additionally, we acknowledge the indispensable tools and frameworks provided by the pioneering researchers in this domain, which greatly informed our approach. Lastly, our profound thanks to everyone involved in the background, whose tireless efforts, support, and encouragement have been the backbone of this endeavour. This research truly stands as a testament to the collaborative spirit and shared pursuit of knowledge.

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