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Personal Peacefulness and Griefing as Toxic Behavior in Online Game Players

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ABSTRACT

The objective of this study is to examine the impact of personal peacefulness and disruptive behavior on individuals engaged in online gaming. Personal peacefulness refers to an individual's tranquil disposition, characterized by an inward sense of serenity. This state of being fosters an environment of non-violence and harmony, continually manifesting in many life circumstances. Griefing within the context of online gaming refers to the manifestation of antisocial conduct exhibited by gamers towards their counterparts on the same gaming platform, with the primary objective of deriving personal gratification. The participants in this study consisted of a sample size of 351 individuals who were engaged in online gaming. The data collection process involved the utilization of two distinct scales: the Self-Perception Scale (SPS) for measuring Intrapersonal Peace, which had 12 statement items, and the Grief Play Scale, which consisted of 32 statement items. The findings obtained from the application of Spearman Rho Analysis to the data indicate that the significant value, denoted as p , is equal to 0.01, which is less than the predetermined threshold of 0.05. Consequently, the hypothesis formulated for this study is determined to be accepted. It can be inferred that a significant correlation exists between an individual's personal peacefulness and engagement in griefing behavior.

Keywords: Personal peacefulness, griefing, toxic behavior, online gamers

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh personal peacefulness dan griefing pada pemain online game. Personal peacefulness adalah pribadi damai seseorang yang mengalami ketenangan yang timbul dari dalam diri sehingga menciptakan kondisi tanpa kekerasan dan harmoni secara konsisten dari waktu ke waktu kepada diri sendiri dan pada semua situasi kehidupan. Griefing pada pemain online game adalah perilaku antisosial yang ditunjukkan oleh pemain online game terhadap pemain lain dalam platform game yang sama, yang bertujuan untuk mendapatkan kesenangan semata bagi pemain tersebut. Responden dalam penelitian ini adalah sebanyak 351 pemain online game (257 laki-laki dan 94 perempuan). Pengambilan data menggunakan dua skala, yaitu, skala Self-Perception Scale (SPS) in

Intrapersonal Peace yang terdiri atas 12 item pernyataan dan Grief Play Scale yang terdiri atas 32 item pernyataan. Hasil analisis data melalui Spearman Rho menunjukkan hasil bahwa nilai signifikansi, $p = 0.01 < 0,05$, maka hipotesis dalam penelitian ini diterima. Hal tersebut dapat disimpulkan bahwa terdapat pengaruh yang signifikan antara personal peacefulness terhadap grieving. Selain itu ditemukan bahwa tidak terdapat perbedaan jenis kelamin pada perilaku grieving dan personal peacefulness.

Keyword: *Personal peacefulness, grieving, toxic behavior, pemain online game*

INTRODUCTION

The popularity of video games has experienced a significant surge in recent decades. According to statistical data from Statista in 2020, the global population of online gamers amounted to 877.3 million individuals, while the revenue generated only from online gaming activities reached a substantial sum of 17.141 million US dollars. The phenomenon of growth is also evident in the context of Indonesia. The available data from 2017 indicates that a considerable number of individuals, approximately 43.7 million, engaged in the activity of playing online games. Among these participants, it was observed that 56% were male. Furthermore, within the male player demographic, approximately 47% fell within the age range of 10 to 35 years. According to Newzoo's 2017 report, Indonesia ranks 16th globally in terms of the number of gaming players. In the year 2019, there was a notable upward trajectory in this phenomenon, with an initial figure of 150 million individuals, accounting for approximately 56% of the total population of Indonesia, being officially recorded as actively engaged internet users. As reported by Tomato Digital (2019), a significant proportion of this population, specifically 46%, engage in online gaming activities. The year 2020 exhibits a noteworthy quantity. In accordance with Statista (2020), the estimated number of individuals actively engaged in online gaming is around 47.9 million. Among this population, those aged 25-34 years constitute 44.7%.

Several research have been undertaken which have yielded beneficial findings about the effects of video game play (Granic, Lobel, & Engels, 2014). Several cognitive benefits have been associated with playing video games. These benefits encompass enhanced attention allocation, improved spatial resolution in visual processing, and heightened mental rotation abilities (Green & Bavelier, 2012). Additionally, playing video games has been linked to improved visual spatial cognition (Spence & Feng, 2010), arithmetic skills, memory retention, and group functioning, including the ability to coordinate group activities and assume leadership roles (Thirunarayanan & Vilchez, 2012). Furthermore, adolescents who engage in role-playing games have shown increased problem-solving skills (Adachi & Willoughby, 2013). Puzzle-based video games can also help people feel happier, relax, and experience less worry (Russoniello et al., 2009).

Video games can also elicit negative feelings, such as rage, despair, frustration, and even anxiety, in addition to positive ones (Granic et al., 2014). The previously mentioned feelings are intricately linked to the ongoing gameplay. Every game possesses distinct sets of rules, work requirements, and time constraints that must be adhered to in order to successfully complete the game. Massively multiplayer online role-playing games (MMORPGs) necessitate players to assume specific roles, achieve elevated ranks or levels, and collaborate with fellow players, sometimes by establishing an in-game community. Communities within the context of gaming can manifest themselves in the shape of guilds or townships. Collaborative efforts among community members are crucial for enhancing the overall well-being of their community and fostering a competitive edge vis-à-vis other communities. MOBA games have implemented an additional regulation whereby players must consistently defeat other players in order to achieve a specific rank, hence granting them supplementary privileges within the game. MMORPG and

MOBA are frequently encountered gaming genres in the realm of electronic sports (E-Sports). Games such as League of Legends, Defense of the Ancients (DotA), Mobile Legends, Fortnite, and Player Unknown's Battlegrounds (PUBG) represent a few instances of electronic sports (e-sports) that are frequently engaged in competitive tournaments. According to Neto, Yokoyama, and Becker (2017), electronic sports (e-sports) exhibit a high level of competitiveness and place significant emphasis on fostering teamwork among participants within a single team.

Successful attainment of victory in online games as a collective unit necessitates the promotion of collaboration and the implementation of meticulously devised plans, which must be consistently monitored and adjusted to ensure optimal performance throughout the duration of the game. Therefore, it is imperative that there is ongoing communication among the players. One recurring issue that frequently emerges is the disruption of this relationship as a result of participants' unpleasant behavior. According to Shi, Renwick, Turner, and Kirsh (2019), findings from the research indicate that online games have the potential to induce many issues in individuals, such as negative behavior, in addition to the manifestation of unpleasant feelings. The occurrence of detrimental conduct in the context of online gaming, encompassing activities like cyberbullying, griefing, causing disturbances, and engaging in cheating, is sometimes classified under the umbrella term of toxic behavior (Kwak, Blackburn & Han, 2014). The phrase "toxic behavior" encompasses a range of unpleasant activities, such as harassment (Adinolf & Turkay, 2018).

The concept of toxic behavior lacks a universally agreed-upon definition. The occurrence of this phenomenon can be attributed to variations in anticipated conduct, cultural norms, regulations, and ethical principles that are employed within a game (Kwak, Blackburn, & Han, 2014). According to Donaldson (2017), the lack of a clear and universally accepted definition of toxic behavior in gaming contributes to ambiguity, which in turn can result in players being unaware of their own acts and causing misunderstanding among themselves.

In their study, Neto, Yokoyama, and Becker (2017) characterized toxic conduct within the context of online interactions as encompassing two distinct forms: griefing and toxic disinhibition. Instances arise when players engage in actions that contravene the established regulations, which may be specific to their own team or collectively devised by the game developer, thereby exhibiting behaviors that are deemed antisocial. According to Caudill (2015), the previous conduct has the potential to elicit feelings of wrath and frustration among fellow players, thereby resulting in subpar performance. Individuals who have been subjected to toxic behavior from other participants in gaming environments often experience significant emotional consequences in their offline lives. This can be attributed to the substantial investment of time and energy that players typically dedicate to their gaming activities. According to Tang and Fox (2016), individuals who have been subjected to prolonged instances of toxic behavior from fellow players may develop a perception that such behavior is customary and may then exhibit similar conduct in subsequent instances. As stated by Kwak and Blackburn (2014), individuals who are subjected to abusive behavior during gameplay may encounter feelings of discouragement, which might potentially lead to a cessation of their gaming activities.

Extensive research has been conducted on the phenomenon of bad behavior in online multiplayer games, including log data analysis as a primary methodological approach (Adinolf & Turkey, 2018). However, it is noteworthy that there is a dearth of study pertaining to the phenomenon of toxic conduct directed towards those engaged in online gaming within the context of Indonesia. The sources of information regarding harmful behavior in Indonesia primarily consist of news stories. The preliminary examination conducted by the researchers involved a sample size of 125 individuals who provided comments on an online news article pertaining to harmful behavior (Indozone, 2020). The findings indicated that a total of 121 individuals expressed their concurrence with regards to the manifestation of toxic behavior

among Indonesian players. Additionally, 54 individuals commented on the toxic behavior exhibited by others, employing derogatory language in their remarks. Furthermore, 9 individuals reported that they had ceased playing the game and uninstalled it as a consequence of the toxic behavior displayed by fellow players. Based on the preliminary investigation, it is evident that there exists a prevailing inclination among individuals to lack a profound comprehension of the fact that poisonous behavior can be classified as a manifestation of violence.

One way to mitigate the violent conduct carried out by perpetrators is to cultivate the capacity for peace inside the individual concerned. The cultivation of serenity within an individual's particular disposition can contribute to the development of their capacity for peace. Personal peacefulness refers to the cultivation of inner tranquility within an individual, encompassing intrapersonal harmony and a peaceful mindset that enables one to interact peacefully with others, social groups, the nation, nature, and a higher power. This state of personal peacefulness is characterized by its enduring consistency over time (Puopolo et al., 2014; Anderson, 2004). A disposition for self-acceptance, self-compassion, and non-violence toward oneself, a state of relative harmony between aspects of oneself, and an emotional state that fosters peaceful relationships or is linked to peace and harmony are three ways to define intrapersonal peace as a personality trait (Nelson, 2014).

The assumption is that cultivating inner serenity inside an individual can potentially mitigate or even preempt violent behavior stemming from normative views. The concept of belief is a subjective domain that has a close association with an individual's personality. The process of cultivating peace is initiated via the cultivation of peaceful thoughts and behavior exhibited by each individual (Kartadinata, 2014). The findings of multiple research indicate that personal tranquility has the potential to impact various aspects of well-being, including physical health, positive emotions, happiness, life satisfaction, inner serenity, psychological health, psychological well-being, meaningfulness of life, empathy, and compassion (Nelson, 2014; Puopolo, 2014).

Based on this observed phenomena, scholars endeavored to investigate the correlation between individual tranquility and grieving, which is a manifestation of toxic conduct among participants in online gaming.

RESEARCH METHOD

The present study implements a quantitative research methodology. The research sample comprised 351 individuals, with 257 identified as male and 94 as female. The sample technique utilized in this study is incidental sampling. The process of data collecting involved the use of two distinct scales, specifically:

1. The Self-Perception Scale (SPS) in Intrapersonal Peace, as developed by Nelson (2014), was applied to collect the data. The researcher was granted authorization to translate the scale into Indonesian language for the purpose of its utilization in the present research sample. The Intrapersonal Peace Scale (SPS) is specifically developed to assess intrapersonal peace as a personality feature shown by individuals. There are two distinct categories that are sought to be quantified in the context of SPS. The initial category pertains to the concepts of self-acceptance, self-compassion, and abstaining from self-inflicted harm. The second category pertains to the establishment of harmony among different facets of one's individuality. Each item within this scale is accompanied with a range of answer choices, with a rating scale that spans from 1, representing "never," to 6, representing "always." 6 items out of a total of 12 items in the SPS are given reverse scores. There is a positive correlation between the score exhibited by the respondent and their inclination towards self-acceptance, self-compassion, and non-violence towards oneself.

Additionally, higher scores indicate a greater level of internal harmony inside the individual. Previous studies have demonstrated that the Scale of Psychological Symptoms (SPS) exhibited a strong level of reliability, specifically with a coefficient alpha value of 0.81 (Khayyer, et.al., 2019).

2. The researchers conducted data collecting by utilizing a modified version of the Grief Play Scale (GPS) developed by Ladanyi and Doyle-Portillo (2017). This scale consists of four distinct taxonomic categories, namely: harassment, coercion of power, deception, and greedy play. The scale utilized in this study comprises a total of 32 statement items. Each statement is accompanied by a rating scale consisting of four possibilities, ranging from 1 (always) to 4 (never). The initial step was the assessment of the reliability and validity values of the GPS adaptation scale. Following the completion of the testing process, the obtained Cronbach's reliability coefficient was determined to be $\alpha = 0.937$. The validity coefficients for all items range from $r = 0.340$ to 0.688 , with a statistically significant p-value of 0.00.

Subsequently, the gathered data was subjected to statistical analysis utilizing the Spearman's rank correlation coefficient (Spearman Rho) and independent samples t-test, incorporating SPSS version 27.0.

RESULT AND DISCUSSION

Result

Table 1. Spearman Rho Analysis

			Grief Toxic Behavior	Personal Peacefulness
Spearman's rho	Grief Toxic Behavior	Correlation Coefficient	1.000	.137*
		Sig. (2-tailed)	.	.010
		N	351	351
	Personal Peacefulness	Correlation Coefficient	.137*	1.000
		Sig. (2-tailed)	.010	.
		N	351	351

*. Correlation is significant at the 0.05 level (2-tailed).

Based on table 1, it can be stated that there is a significant influence between the personal peacefulness and grieving variables. This is because the significance value is $p=0.01$ where $p \leq 0.05$.

Table 2. Independent Sample Test Results

	Sex	N	Mean	Std. Deviation	Std. Error Mean	Sig. (2 tailed)
Grief Toxic Behavior	Male	257	129.22	23.741	1.481	0.553
	Female	94	130.87	21.180	2.185	
Personal Peacefulness	Male	257	49.99	10.830	.676	0.158
	Female	94	51.78	9.389	.968	

Based on the test results in table 2, it can be stated that there is no difference in grieving and personal peacefulness between men and women. This shows that men and women have the same tendency for grieving behavior when playing online games.

Discussion

Griefing in the context of online games refers to a behavior characterized by deliberate actions undertaken by a player with the goal of causing disruption or interference in the game experience of another player, sometimes driven by personal gratification or ulterior motives. Research conducted by Achterbosch, Miller, and Vamplew (2017) has revealed that the act of griefing in Massively Multiplayer Online Role-Playing Games (MMORPGs) has been associated with a decline in player engagement and may potentially pose a threat to the viability of smaller MMORPGs. The concept of griefing encompasses several interpretations and conflicting perspectives, as individuals who engage in this behavior often hold positive or neutral sentiments towards their actions (Achterbosch, Miller, & Vamplew, 2013). Various forms of griefing can be identified, such as scamming, greed play, and purposeful fallacy (Rubin & Camm, 2013).

Bartle (2012) provided a comprehensive definition of a griefer as a someone who intentionally engages in actions with the explicit intention of deriving pleasure from the resulting distress experienced by others. In their study, Foo and Koivisto (2004) provided a characterization of griefers as those who adopt play styles that intentionally disturb the experiences of other players. Lin and Sun (2005) offered a definition that aligns closely with Foo and Koivisto's, but with the inclusion of the notion that griefers receive pleasure or satisfaction from their disruptive behavior. According to Barnett and Coulson (2010), there exists a correlation between griefers and bullies, as these individuals derive pleasure from engaging in anti-social actions that hinder the overall gaming experience for the targeted gamers.

Lam and Riedl (2011) employ the term "bully" to characterize griefers, positing that these individuals can be most aptly characterized as the perpetrators of virtual world bullying and sociopathic behavior. There is a consensus among studies about the prevailing nomenclature of the concepts of griefing and griefer. It is widely acknowledged that three specific impacts must be observed in order to classify a player as a griefer. There are three key elements to consider in this context. Firstly, the activity in question is deliberate and purposeful. Secondly, it has the effect of interfering with the enjoyment of another participant. Lastly, the one initiating the action derives personal satisfaction or gratification from engaging in it.

A griefer may be designated as the participant accountable for instigating the activity, provided that all three of the aforementioned conditions are fulfilled. However, it is conceivable that engaging in these activities may evoke adverse emotional responses beyond ordinary pleasure. Furthermore, there are potential advantages in terms of economic profits, acquisition of digital assets, or the exercise of power. Numerous studies have been undertaken to ascertain diverse manifestations of griefing that seem to correspond with the aforementioned complete delineations (Achterbosch, Miller, & Vamplew, 2017).

According to Thacker and Griffiths (2012), those that engage in griefing behavior often participate in extended gaming sessions and are mostly characterized by their youth and masculine gender. The findings of this study indicate that there are no discernible gender differences in terms of predisposition towards engaging in griefing behavior. Griefing is a behavior that can be exhibited by individuals irrespective of their gender. Due to the potential detrimental effects of griefing on both individual gamers and the gaming community at large, it is imperative to implement proactive strategies aimed at deterring and mitigating such behavior.

Based on the findings shown in Table 1, it can be inferred that there exists a statistically significant relationship between an individual's personal tranquility and their engagement in toxic conduct, specifically griefing, within the context of online gaming. The concept of personal serenity can be examined through several theoretical frameworks. The concept

involves the attainment of inner peace, the cultivation of interpersonal peacefulness, and the development of peaceful attitudes towards other social groups and nations. The concept under consideration exhibits a correlation with the fundamental requirements of individuals, their affective states, and the application of mindfulness techniques. The level of personal tranquility is subject to the influence of broader social environments, and has the potential to have effects on both individuals and societies. The cultivation of individual tranquility has the potential to positively impact one's overall state of welfare. The attributes associated with personal tranquility encompass sentience, allostasis-homeostasis, spirituality, and self-personhood. These attributes interact with factors such as internal care, self-relating relationships, and deliberate syntactic awareness. The notion of personal peacefulness is closely connected to the concept of peaceful well-being, as discussed by Sims, Nelson, and Puopolo (2014), Tint and Zinkin (2014), and Sims (2014).

The findings from multiple studies indicate a positive correlation between an individual's personal sense of tranquility and their physical well-being. This inner peace is closely associated with psychological wellness, which is characterized by experiencing positive emotions, dedicating oneself to personal growth, perceiving life as meaningful, experiencing happiness and life satisfaction, making informed choices regarding life goals, and exhibiting affection and contentment while being less prone to anxiety and depression (Fakhri & Buchori, 2022). Based on this premise, it can be inferred that the presence of personal tranquility has the potential to impact the manifestation of grieving behavior. This is due to the fact that individuals who cultivate a state of personal peacefulness are not only able to exhibit inner harmony, but also extend this sense of calm towards others. This aligns with Nelson's (2014) proposition about the notion of personal serenity, wherein it is posited that personal peacefulness may be delineated into three distinct conceptual dimensions, therefore characterizing it as a personality attribute. The first aspect pertains to the practice of self-acceptance, self-compassion, and the cultivation of a non-violent self-orientation. The second aspect pertains to the establishment of a reasonably persistent state of harmony among many facets of an individual's being. The third form of disposition pertains to emotional states that contribute to the establishment of harmonious relationships within an individual.

CONCLUSION

Based on the extant literature, it can be deduced that a notable correlation exists between an individual's level of personal peacefulness and the manifestation of toxic activity, specifically grieving, among online gamers. Additional findings indicate that there are no discernible gender disparities in terms of grieving and personal tranquility. The present study aims to serve as a foundation for future research endeavors exploring the phenomenon of grieving as a form of toxic behavior among online game players. It is worth noting that no prior research conducted in Indonesia has specifically investigated the association between these two variables.

This study explores a novel approach to assessing individual peacefulness and the prevalence of hazardous behavior in online gaming within the context of Indonesia. The researcher suggests that future researchers interested in investigating the same topic should consider examining personal peacefulness and online toxic gaming behavior in conjunction with additional variables or alternative demographic groups. This approach would contribute to the existing body of knowledge, given the limited research currently available on personal peacefulness. The present study examines the phenomenon of toxic behavior in online gaming within the context of Indonesia.

REFERENCES

- Achterbosch, L., Miller, C., & Vamplew, P. (2017). A taxonomy of griefer type by motivation in massively multiplayer online role-playing games. *Behaviour & Information Technology*, 36:8, 846-860, DOI: 10.1080/0144929X.2017.1306109
- Achterbosch, L., Miller, C., & Vamplew, P. (2013). Ganking, corpse camping and ninja looting from the perception of the MMORPG community: acceptable behavior or unacceptable griefing? In *Proceedings of The 9th Australasian Conference on Interactive Entertainment: Matters of Life and Death (IE '13)*. Association for Computing Machinery, New York, NY, USA, Article 19, 1–8. <https://doi.org/10.1145/2513002.2513007>
- Adinolf, S., & Turkay, S. (2018). *Toxic Behaviors in Esports Games. Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts - CHI PLAY '18 Extended Abstracts*.doi:10.1145/3270316.3271545
- Adachi, P. J., & Willoughby, T. (2013). More than just fun and games: The longitudinal relationships between strategic video games, self- reported problem solving skills, and academic grades. *Journal of Youth and Adolescence*, 42, 1041–1052. doi:10.1007/s10964-013-9913-9
- Anderson, R. (2004). A definition of peace. *Peace and Conflict: Journal of Peace Psychology*, 10, 101–116.
- Barnett, J. & Coulson, M. (2010). Virtually Real: A Psychological Perspective on Massively Multiplayer Online Games. *Review of General Psychology*, 14 (2): 167– 179. doi:10.1037/a0019442.
- Bartle, R. A. 2012. “What to Call a Griefer?”. http://terranova.blogs.com/terra_nova/2007/10/what-to-call-a-.html.
- Caudill, R. 2015. Altruism Online : An Ethnographic Exploration into League of Legends. *Summer Research* (2015).
- Donaldson, S. 2017. I Predict a Riot: Making and Breaking Rules and Norms in League of Legends. *Proceedings of DiGRA*, 2017, 11.
- Fakhri, N., & Buchori, S. (2022, April). Intrapersonal peacefulness in Indonesian adolescents. In *1st World Conference on Social and Humanities Research (W-SHARE 2021)* (pp. 188-192). Atlantis Press.
- Foo, C. Y. & Koivisto, E.M.I. (2004). Defining Grief Play in MMORPGs: Player and Developer Perceptions. In *Proceedings of the 2004 ACM SIGCHI International Conference on Advances in Computer Entertainment Technology Singapore*, 245–250. doi:10.1145/1067343.1067375.
- Granic, I., Lobel, A., & Engels, R. C. M. E. (2014). The benefits of playing video games. *American Psychologist*, 69(1), 66–78. <https://doi.org/10.1037/a0034857>
- Green, C. S., & Bavelier, D. (2012). Learning, attentional control, and action video games. *Current Biology*, 22, 197–206. doi:10.1016/j.cub .2012.02.012
- Indozone. (2020, January 31). Komunitas Mobile Legends luar negeri sebut pemain di Indonesia toxic! *Line Today*. <https://today.line.me/id/pc/article/Komunitas+Mobile+Legends+Luar+Negeri+Sebut+Pemain+di+Indonesia+Toxic-1NMxvv>
- Kartadinata. (2014). *Pendidikan Kedamaian dan Pendidikan untuk Kedamaian*. Bandung: UPI Press.
- Kwak, H., Blackburn, J., & Han, S. (2015, April). Exploring cyberbullying and other toxic behavior in team competition online games. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 3739-3748).

- Ladanyi, J., & Doyle-Portillo, S. 2017. The development and validation of the Grief Play Scale (GPS) in MMORPGs. *Personality and Individual Differences*, 114, 125-133.
- Lam, S. T. K. & Riedl, J. (2011). Expressing my Inner Gnome: Appearance and Behavior in Virtual Worlds. *Computer*, 44 (7): 103-105
- Lin, H. & Sun, C-T. (2005). The 'White-eyed' Player Culture: Grief Play and Construction of Deviance in MMORPGs. *Changing Views: Worlds in Play: Proceedings of the 2005 Digital Games Research Association Conference*, University of Vancouver, Vancouver
- Neto, J. A. M., Yokoyama, K. M., & Becker, K. (2017). Studying toxic behavior influence and player chat in an online video game. *Proceedings of the International Conference on Web Intelligence - WI '17*.doi:10.1145/3106426.3106452
- Nelson, L.L. (2014). *Peacefulness as a Personality Trait*. Gregory K. Sims, Linden L. Nelson and Mindy R. Puopolo. (Eds). *Personal Peacefulness Psychological Perspectives*. New York: Springer.
- Newzoo. (2017). *Indonesian gamer: key consumer insights* [Data Set]. Newzoo. <http://www.newzoo.com/consumer-insights>.
- Puopolo, M.R., Nelson, L.L., & Sims, G.K. (2014). *Introduction to Personal Peacefulness: Psychological Perspectives*. Gregory K. Sims, Linden L. Nelson and Mindy R. Puopolo. (Eds). *Personal Peacefulness Psychological Perspectives*. New York: Springer.
- Rubin, V.L. & Camm, S.C. (2013). Deception in video games: examining varieties of grieving. *Online Information Review*, Vol. 37 No. 3, pp. 369-387. <https://doi.org/10.1108/OIR-10-2011-0181>
- Russoniello, C. V., O'Brien, K., & Parks, J. M. (2009). EEG, HRV and psychological correlates while playing Bejeweled II: A randomized controlled study. In B. K. Wiederhold & G. Riva (Eds.), *Annual review of cybertherapy and telemedicine 2009: Advance technologies in the behavioral, social and neurosciences* (Vol. 7, pp. 189-192). Amsterdam, The Netherlands: Interactive Media Institute and IOS Press. doi:10.3233/978-1-60750-017-9-189
- Spence, I., & Feng, J. (2010). Video games and spatial cognition. *Review of General Psychology*, 14(2), 92-104. <https://doi.org/10.1037/a0019491>.
- Tang, W.Y., & Fox, J. (2016). Men's harassment behavior in online video games: Personality traits and game factors. *Aggressive Behavior* 42, 6: 513-521.
- Thacker, S., & Griffiths, M. D. (2012). An exploratory study of trolling in online video gaming. *International Journal of Cyber Behavior, Psychology and Learning*, 2(4), 17-33. <https://doi.org/10.4018/ijcbpl.2012100102>
- Thirunarayanan, M. O., & Vilchez, M. (2012). Life skills developed by those who have played in video game tournaments. *Interdisciplinary Journal of Information, Knowledge, and Management*, 7, 205-220. <https://doi.org/10.28945/1748>.
- Tint, B., & Zinkin, M. (2014). Engaging Personal Peace: Micro and Macro Facets of Needs, Emotions and Mindfulness. In: Sims, G., Nelson, L., Puopolo, M. (eds) *Personal Peacefulness. Peace Psychology Book Series*, vol 20. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-9366-2_7
- Sims, G. K., Nelson, L. L., & Puopolo, M. R. (Eds.). (2014). *Personal peacefulness: Psychological perspectives*. Springer Science + Business Media. <https://doi.org/10.1007/978-1-4614-9366-2>
- Sims, G. (2014). Towards a Theoretical Model of Personal Peacefulness. In: Sims, G., Nelson, L., Puopolo, M. (eds) *Personal Peacefulness. Peace Psychology Book Series*, vol 20. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-9366-2_8