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Relationship of Digital Media Consumption with Grittiness Among Filipino Children Aged 7-8 Years Old

Jasper Vincent Alontaga [a, *], Rachel Tongson [a]

[a] De La Salle University, Philippines

Abstract

This research focuses on the relationship of digital media consumption with the grittiness of Filipino children 7-8 years old. This study followed an explanatory sequential research design method. It involved 78 children and 76 parents. Despite the prevalence of digital devices and digital media consumption in Filipino homes, results of the research showed that there is no significant relationship between digital media consumption and grittiness of children. However, specific digital media activities such as listening to music during weekdays for non-school purposes have significant positive weak correlation with grit but have a negative weak correlation during weekends. Similarly, instant messaging and social media were found to have significant negative weak correlations to grit. The perception of parents on how digital media consumption affects the grittiness of their children were also gathered and four major themes emerged – the role of the digital in the home, the perceived effects of digital, parent interventions to manage digital consumption, and the child's nature, which according to parents influence digital media consumption. This research has revealed how extensive the reach and penetration of digital devices and media are in Filipino homes. Thus, it is important that stakeholders in childcare learn how to capitalize on the digital interests of children to develop grit.

Keywords: grit, digital media consumption, digital devices, digital media activities.

1. Introduction

The trajectory for academic and life success, according to research, is established in early childhood as they develop habits for learning and socialization. The Sociocultural Theory of Vygotsky states that early environments and experiences are among the important factors that affect child development. Today, people all over the world are surrounded by media, and the portability of digital devices allows us to stay connected and reachable (Roberts, Foehr, 2008). It cannot be denied that it is the most powerful force in young people's lives today.

Since the introduction of the internet, research has observed children's growing habit and exposure to digital media. A survey showed that 67 % of children, 5-8 years old, already have their own mobile devices, making online viewing more accessible (Rideout, Robb, 2017). In the Philippines, there is 68 % internet penetration (Byrne et al., 2016). Moreover, a digital phenomenon called the "pass back effect," an occurrence where parents pass their mobile phones to their children, gives these children pseudo-ownership of media devices. This occurrence happens 50 % of the time, and often when travelling to keep children entertained (Chiong, Shuler, 2010). However, despite the overwhelming statistics on digital media consumption, UNICEF reports that there is still no common consensus on the rewards and risks that connectivity brings (Keeley, Little,

* Corresponding author
E-mail addresses: jasper.alontaga@dlsu.edu.ph (J.V. Alontaga)

2017). To the detriment or development of children, there is no clear stance. No one knows, as experts in various fields, continue to track digital media consumption and its effects on children.

Grit is a non-cognitive trait associated with self-control, and one of the Big Five personality traits – conscientiousness. Its constructs and associated skills are elements of socio-emotional competence (National Research Council, 2015). Socio-emotional development is critical during the early childhood years because these skills are used for interaction, through which learning occurs (Allen et al., 2015; Reschke, 2019; Rueda, Paz-Alonzo, 2018; Stanberry, 2017). Given the relative newness of grit as a construct determinant of success, many research focus on the relation of grit to academic success (Cross, 2014; Hodge et al., 2018; Reraki et al., 2015; Rojas, Usher, 2012; Williams, 2017; Wolf, Jia, 2015).

However, grit development may be endangered by the short-term reward-based incentive models espoused by digital media. The instantaneous rewards make self-regulation challenging and affirms the unacceptable behavior of always being online. This kind of instant reward and gratification may undercut the development of grit, which is founded on the perseverance to pursue an interest despite challenges and setbacks (Roberts, 2014). In this increasing digital age, it is in the cultivation of grit in children that will allow them to succeed despite the instant gratification culture that the 'always on' generation has become (Guida, 2018). The early childhood years is the most relevant stage to investigate the relationship of grit to digital media consumption as habits for development and learning at this stage begin to form (Carlson, 2003).

There are several implications of digital media ownership and rampant internet access. First, it seems that there is an increase in digital media consumption and independence as the child grows older. Based on surveys of children 0-8 years old, digital media consumption on the average is 2.24 hours, an hour more than the recommended media exposure of children below 5 (Hill et al., 2016; Rideout, Robb, 2017). When the child reaches 8-10 years old, digital media consumption rises to 5 hours on the average (Rideout et al., 2010). In addition, research reveals that children spend more time using media devices during weekends than on weekdays (Lee et al., 2019). All these may be due to the proliferation of inexpensive digital devices and the shift of TV as a new media platform to search or stream for movies (Rideout et al., 2010). There were also studies that show how parental co-use of media goes down to 11–19 % when the child is 5-8 years old, from a high of more than 50 % when the child is below 5 years of age. In addition to this, children 5-8 years old choose their own video to watch 95 % of the time. The primary online activities 8-year-old children do are watch videos in YouTube, lurk and participate in social media, and online gaming (Rideout et al., 2010). Parents of children find it hard to make them stop using digital media 47 % of the time (Rideout, Robb, 2017).

The second implication is that media multi-tasking has become rampant. Media multi-tasking is defined as the simultaneous use of media resources to meet one's communication needs (Domoff et al., 2019; Van Der Schuur et al., 2015). Studies show that children 8-10 years old, consume digital media at an average of 5 hours per day, but if multi-tasking will be considered, total digital media consumption is 8 hours. Higher levels of multi-tasking were found to be negatively related to sustained attention and cognitive control in everyday life (Loh, Kanai, 2014; Van Der Schuur et al., 2015). Lastly, digital media consumption has become predominantly passive. Children 5-8 years old spend most of their time watching videos (Rideout, Robb, 2017). Meanwhile, in the Philippines, the initiative to do creative content is low (Byrne et al., 2016). Thus, it is not surprising that the #1 digital platform consumed in 2019 is YouTube (Heller, 2018).

Grit is the perseverance and passion for long-term goals (Duckworth et al., 2007). Grit, as a construct, is rooted on the ideas of self-control, defined as the ability to resist temptation, and conscientiousness defined as having the will to achieve (Cross, 2014; Digman, Takemoto-Chock, 1981; Duckworth et al., 2007). However, the construct of grit, according to Duckworth (2016), differs on consistency of interest and long-term stamina. For example, a person who is conscientious or has self-control may finish a task but may change careers frequently. Grit requires sustained interest and effort on projects that may take longer to complete (Duckworth, Quinn, 2009). Grit is a compound trait comprising of two factors – perseverance of effort and consistency of interest (Duckworth et al., 2007). Alternately, perseverance is persistence and deals with one's ability to continuously apply effort in a difficult task (Lufi, Cohen, 1987), while consistency of interest captures the individual's ability to maintain interest over time (Hodge et al., 2018).

The most significant finding in this popular research on grit is that grit, not IQ, was found to be a predictor of success. Studies initiated by A.L. Duckworth (Duckworth, 2016) found that grit

was associated with positive student performance. This was further supported by other studies that showed grittier students got higher GPAs (Cross, 2014; Wolf, Jia, 2015). Grit was found to predict academic achievement positively and was correlated to academic motivation (Reraki et al., 2015). It was also found to have a direct positive relationship with productivity (Hodge et al., 2018) and grittier individuals also showed better resiliency and growth mindset (Allen et al., 2015). Studies have shown that considering individuals with equal talent, the grittier ones do better. Grit has been identified as an important ingredient to adult and student achievement. This just shows how significant this non-cognitive factor is in predicting success.

One hypothesized determinant of grittiness in children is the time and content consumed using digital media. Given the relative newness of the concept of grit, literature to support this study was focused on the effects of digital media use to the constructs associated to grit, particularly self-control. Self-control is best thought of as self-regulation or the ability to override one's impulses (Mamayek et al., 2017; Muraven et al., 1999). It is also associated with perseverance (Bandura, Walters, 1977). There are concerns that using digital media as a tool to distract or regulate children's behavior may affect their ability to develop mechanisms for self-regulation in the long-term (Radesky et al., 2015). Research revealed that individuals have difficulty establishing self-control when using the Internet (Cliff et al., 2018; Davis, 2001; Tokunaga, 2013).

Other studies focused on the effects of popular digital media activities, such as social media, gaming and watching videos, to self-regulation or self-control, yielded similar results (Firat, 2017; Gabbiadinini et al., 2014; Wilcox, Stephen, 2013). However, other research also suggested, playing video games that involve strategy to reach long-term goals was positively correlated with self-regulation (Gabbiadini, Greitemeyer, 2017). Thus, well-designed, interactive games can be a powerful environment for learning because it can challenge children to learn new skills and behaviors (Lieberman, 2006).

According to A.L. Duckworth et al. (Duckworth et al., 2007), self-control and grit are strongly correlated, however not perfectly. She claims that some people with high levels of self-control can handle temptations but are not able to sustain the interest to pursue long term goals (Duckworth, Gross, 2014). In the attempt to understand effects of digital media consumption to consistency of interest, attention which is another important construct of grit, was reviewed. Research supports that whenever we turn attention to a subject, we have a feeling called interest. Thus, interest depends upon attention (Burnham, 1908).

2. Materials and methods

The research followed an explanatory sequential research design method. There were two sets of participants, namely the children and their parents. Total participants were 78 children and 76 parents. Out of 78 children's respondents, 30 (38.46 %) are 8-year-olds, and 48 (61.54 %) are 7-year-olds; with 49 % male and 51 % female. Most of the children live in a dual parent household (96 %). For the qualitative interviews, a total of 10 parents were interviewed. Three (3) parents were interviewed per grit level, except for the 'non-gritty level' as only one child claimed to be non-gritty. Participants were chosen using the non-probability sampling snowball technique.

Upon electronic submission of the filled-out consent and assent forms, a video instruction for parents was sent via SMS or e-mail. The video was a 3-minute instruction video where the researcher explained the Google form questionnaires and guidelines on how to fill it out and a reminder to assist children in completing the forms.

The Digital Media Consumption Questionnaire contained two parts. The first part was gathering of demographics and the second part included questions about digital media consumption. The survey on digital media consumption was like a Likert type questionnaire where parents had to choose among a range of time their children did an online or offline digital media activity. This questionnaire was adapted from the *2020 Common Sense Census* and the *Kaiser Family Foundation questionnaire* on media use among young children and teens. This adapted questionnaire was completed by the parents based on observation of their child's digital media use. Parents were asked to choose a focal child in their household as the reference in filling out digital media consumption questions.

The Grit Scale for Children was adapted from *Angela Duckworth's 8-Item-Grit Scale for children* known as *Grit-S*. It is a two-factor scale which measures trait level perseverance and passion for long term goals. This was consistent with the Theory of grit as a compound trait. Confirmatory analyses supported a two-factor structure, and both showed adequate internal consistency and were strongly

intercorrelated, r = .59, p < .001. Grit-S was a more economical measure of grit, compared to the original 12-Item-Grit Scale, known as Grit-O. The Grit-S is a 5-point Likert type grit scale. This was a self-evaluation questionnaire completed by the child under the guidance of their parents. A language expert was tapped to translate the scale from English to Filipino.

Online Interview with the parents was conducted to further understand the children's digital behavior. The interview was non-structured and was conducted after the completion of quantitative surveys.

For the quantitative data, descriptive statistics, particularly mean and frequency were utilized for demographics and online activities.

For the total Grit-S score, reverse coding was used for the Grit-S scale, particularly for questions 1, 3, 5, and 6. These are the one that refer to Consistency of Interest and was done in that way so that the computation for the correlation values will not show inverse direction (Roszkoski, Soven, 2010).

T-test was used to compare differences among sub-groups. Only two demographic factors were included to determine if there is a significant difference between grouped demographic factors in digital media consumption, that is, gender and educational attainment of parents. The other demographic factors like parent households, household income, and academic degree were excluded because of the unequal skew in number of respondents. Also, the age demographic factor was excluded because digital media consumption of a 7-8-year-old are usually lumped together due to nearness of age (Rideout, Robb, 2017). Pearson r correlation was also used to establish significant relationships, while regression analysis was used to understand the effect of digital media consumption to grittiness.

For the qualitative data, thematic analysis approach was used (Clarke, Braun, 2014) and it involved a six-step to identify the themes (Nowell et al., 2017). The themes and process transcriptions were further examined and certified by a pre-school educator.

3. Discussion

The digital media consumption of Filipino children is not far from the recorded digital media usage trends in the existing research of Western countries. In terms of accessibility and ownership, children 7-8 years old had higher accessibility to digital devices than ownership, which is congruent to the 'pseudo-ownership' concept of media devices (Chiong, Schuler, 2010; Fitzpatrick et al., 2023). This may be due to the economic class, middle to upper, of most of the respondents and thus have the means to acquire multiple digital devices for family use. Hours of exposure to digital media is at a minimum of 9.5 hours per day, which comes close to the data from past research which states that children 8-10 years old consume up to 8 hours of digital media when multi-tasking (Van Der Schuur et al., 2015). The phenomenon of using TV as a new media platform is common, as parents revealed that one of their problems was "televisions right now can access the Internet." This means that the digital media content is so ubiquitous at home, that a traditional medium like the television has been invaded. This makes access to digital media content more challenging to control. Like the existing literature from Common Sense Media, parents find it hard to make their children stop consuming digital media without negotiation, and some would often give in. This inconsistency in implementing established rules at home is a common finding in past research, where parents are not necessarily effective in limiting child use at home (Rideout et al., 2003) and, at times, opt for indirect methods of influencing their children's media use (Savadova, 2023). The implication is that the children will have more exposure to digital media, which according to interviewed parents consumes most of their time. It was added that they understand the negative impact on the child's behavior.

The top activities consumed during weekends for non-school purposes are primarily passive such as watching online TV shows or movies and interactive such as playing online games – a common finding in past research among children 5-8 years old (Rideout et al., 2010). Results of this research showed that there is no significant difference in digital media consumption among girls and boys. However, when broken down to individual digital activities, instant messaging between genders showed a significant difference with males being higher users. This is contradictory to U.S research where girls were the predominant users of this activity (Common Sense Media, 2019). The boys were found to use instant messaging more, possibly due to gaming. Playing games is one of the common social activities being done, complemented with instant

messaging and calls for immediate interaction with friends. As a parent puts it "they play so much with friends. They require a phone to talk to each other."

For non-school purposed, playing video games is among the top 5 digital media activities among the boys during weekends and weekdays whereas girls who only play computer games only on weekends. This distinction in digital media use may have something to do with brain differences between males and females. According to research, men could be more biologically prone than women to gaming obsession, while women are more compelled to keep up with what their friends are posting in social media (Jargon, 2019). Results of this research also show that siblings appear to have an influence in the increased consumption of digital media, which supports past research that says having siblings appears to influence increase and decrease of digital media use (Bagley et al., 2006; Davies, Gentile, 2012; Hardy et al., 2006). Parents have observed that when a sibling is online playing digital games, and the other is doing a task, the latter would sacrifice the quality of work to participate in the play.

This research presented the opportunity to uncover a nuance on how Filipino families regulate digital media consumption in their homes, i.e., by emphasizing studies first. Compared to Western countries, Asian parents see education as an important path to success (Breitenstein, 2013). This is manifested by setting home rules that put study first as shown in the statement, "weekend they (children) can use it (the internet) 2:30 p.m. onwards, provided all homework and quizzes are done. If there is pending, no play." It was also noted during the interviews that digital media consumption was used more as a punishment through deprivation, than as a form of reward. However, leniency in the use of digital media is seen once all academic work is done. This disciplinary strategy of using reinforcement and punishment to modify behavior is rooted on the Behaviorism Theory. As a result of punishing or rewarding digital media consumption in connection with academic performance, it is possible that parents are unknowingly raising grade-conscious children rather than comprehension-focused individuals. Research also suggests that parents should develop a more effective strategy other than screen-related interventions, as this practice may increase the likelihood of children exceeding their media time (Samaha, Hawi, 2017).

The children who responded to the current study were gritty. This means that they can practice perseverance of effort and consistency of interest, the two basic factors that make up grit. Children can mostly relate to the perseverance statements, and mostly to being hard working. Although the practice of self-control may be negatively influenced by exposure to the Internet based on studies (Davis, 2001), it may not always be the case as attested by the parents. The child's nature, according to parents, impact their ability to persevere. This insight also supports past research, which posits that well-designed, interactive games can be a powerful environment for learning because they can challenge children to learn new skills (Lieberman, 2006), create communities of practice in the classroom (Scholes et al., 2022) and improve social and learning outcomes in preschoolers (Fitzpatrick et al., 2023).

Scores on consistency of interest, on the other hand, reveal that children somewhat find themselves distracted. Respondents may be gritty but very much prone to distraction. Some parents say that their child's distraction which later leads to loss of interest. Others, however, believe that exposure to the digital has led to distraction. This is congruent to past research that heavy media multi-taskers were reported to be poor in inhibiting task-irrelevant stimuli and had more failures of attention in everyday life (Lui, Wong, 2012; Ralph et al., 2014). Exposure to digital media also leads to replacement of interests and change of behavior where they seem impatient when viewing contents as shown in the following statements, "they used to read *Thea, Dork Diaries* and *Harry Potter*. Since exposure to digital games, they lost interest in books."

This research reveals that despite the ubiquity of digital devices and its high penetration in homes and consumption practices, there is no significant relationship between digital media consumption and the grittiness of children. Digital media activities, as observed by parents, is claimed to be affecting a child's consistency of interest and perseverance of effort when it becomes a source of distraction and when it affects a child's emotions and behavior when asked to unplug. However, an important factor to consider is how these perceived negative effects are balanced out by the child's nature, parent intervention, and the digital's positive role in the lives of families at this time of the pandemic. According to A.L. Duckworth (Duckworth, 2016), every human trait is influenced by nature or genetic factors and nurture or human experience. This means that some of the variability of grit can be attributed to genetic factors, aside from experiences.

Past research also tells us that parental involvement is positively associated with the development of grit. An example of involvement is when parents push their children to do their best in whatever they do (Howard et al., 2019). This kind of involvement is presently seen in the home, especially when parents instill in their children the importance of studies. Moreover, digital devices are seen by parents as an integral part of family life; they are no longer a privilege but rather a need. This implies that the environment one grows up in really matters, on top of the genes inherited.

It was deduced that using social media and instant messaging during school had a weak but significant negative correlation to grit. This means that the more children use social media and instant messaging, which are classified as activities that are used for communication, the less gritty they become. This is congruent to the studies that claimed how the use of social media, such as Facebook, resulted to lower self-control and mental persistence – constructs that are strongly corelated to grit (Firat, 2017; Wilcox, Stephen, 2013). In the study of M. Firat (First, 2017), the negative relationship of Facebook use to self-control was due to distracting contents. Evidence also suggest that online social networks can influence self-control by elevating feelings of self-worth that leads to impulsive or indulgent behavior (Wilcox, Stephen, 2013). Further, as a person continues to view positive feedback from close friends, this leads to higher feelings of self-respect, which makes one feel deserving of indulgent behavior. This effect of social media on self-control is concerning, given that it is an important skill to social and emotional well-being. The increased penetration of digital media devices that promotes access to social networks will subsequently mean that more people may be prone to make poor choices or decisions that may affect their well-being.

In addition to social media, instant messaging was reported to be detrimental to schoolwork according to research due to more time spent actively chatting on the Internet (Junco, Cotten, 2011). Paying attention to schoolwork and instant messages at the same time may reduce capacity for essential cognitive processing (Mayer, Moreno, 2003). Thus, meaningful learning may be impaired since multitasking may result to increased cognitive demand or mental overload. This means that a divided attention may be detrimental to academic achievement.

Although no significant relationship was found between total digital media consumption to grit, a more thorough investigation was done on the relationship of individual digital media activities to grit. It was discovered that listening to music during weekdays for non-school purposes had a weak but significant positive correlation with grit while doing the same thing during weekends had a weak but significant negative correlation to grit. Some research revealed that music has a positive effect on the socio-emotional behavior of school children as it helps create an environment effective for teaching and learning by promoting a more complex perception of reality, imagination, thought, and attention (Hallam, 2010; Jucan, Simion, 2015; Simion, 2014). Also, socio-emotional learning is integrally related to grit, as self-control is one of the important skills in socio-emotional learning (Chernyshenko et al., 2018). However, past studies also reveal that different types of music impact performance. In the study on the effects of sedative and stimulative music on task performance, it was revealed that stimulative music increased worry scores and interfered with concentration (Smith, Morris, 1977). Stimulating music may increase level of arousal, especially when doing complex tasks, which may lead to task performance deterioration (Hallam et al., 2002). This distraction makes it difficult to sustain tasks or to finish whatever was begun.

No previous research has concerned itself on the varying responses of children to music depending on the time of day and day of the week (North et al., 2004). However, according to existing research, it can be expected that music serves different functions at different times of the day and week. Music experienced during the weekday would be expected to complement other activities, whereas music experienced during weekend would perhaps be more to fulfill emotional functions (North et al., 2004). Thus, it is possible that weekend music may be more distracting as its function is more personal rather than complementary. The relationship of listening to music and grit is a novel finding. This should be investigated further to determine how listening to music in the digital space, as well as its purpose when listened to at a certain time or day, is able to influence grit. More importantly, this could lead to breakthrough ways on how to transpose the process of growing grit while listening to music to potentially other digital media activities that may be of interest to children.

4. Results

Results show that most Filipino children have their own laptops (54 %), tablets (51 %), and smartphones (35 %). Only 7 % do not own any device. In terms of accessibility, higher percentages are seen, i.e., laptops/ desktops (85 %), Smartphones (81 %), Smart TV (72 %), and tablets (67 %). This proves how entrenched digital devices and media are in the lives of young children today.

The top 5 activities being done by males and females during weekends for non-school purposes are similar except during weekdays (Table 1). Females during weekdays tend to spend more time reading e-books, while males spend more time playing video games.

Table 1. Digital Media Consumption for Non-School Purposes Male vs Female

Non-School Purpose	Weekend		Weekday	
	Male	Female	Male	Female
Play computer games	2.40	3.00	2.09	2.64
Play video games	2.53	2.09	2.38	1.82
Play mobile games on phone or tablet	2.35	2.19	2.19	2.32
Watching online videos	2.34	2.54	2.33	2.55
Watching online TV shows or movies	2.79	2.75	2.33	2.53
Use social media	0.00	1.13	1.50	1.50
Instant messaging	1.17	1.33	1.43	1.22
Listening to music	1.54	1.50	1.63	1.57
Reading e-books	1.57	1.80	1.67	2.09
Browsing websites	1.13	1.60	1.50	1.50
Video chatting	1.50	1.46	1.36	1.36
Making own art or music	1.36	1.71	1.55	1.76
Writing something on a computer like a story, blog, etc.	1.60	1.17	1.43	1.60
Giving commands to voice activated speakers	1.33	1.25	1.50	1.08
Online shopping	1.33	1.00	1.33	1.00

Legend: 0.1-1.0 – less than 30 mins; 1.1-2.0 – 30 to 60 mins; 2.1-3.0 – 1 to 3 hrs; 3.1-4.0 – More than 3 hrs

However, for school purposes, Table 2 shows that the activities of males and females are more differentiated during weekdays and weekends, except for the synchronous and asynchronous classes that are common activities, as most schools shifted to online learning due to the pandemic.

Table 2. Digital Media Consumption for School Purposes Male vs Female

School Purpose	Weekend		Weekday	
	Male	Female	Male	Female
Synchronous classes	2.63	2.43	2.86	3.33
Asynchronous classes	2.53	2.47	2.63	2.67
Play mobile games for school	2.00	2.00	1.23	1.13
Watching online videos	2.00	2.00	1.35	1.32
Watching online TV shows/movies	2.20	2.00	1.50	1.40
Use social media for school	2.00	2.00	1.00	1.43
Instant messaging for school	2.50	2.20	1.00	1.29
Listening to music for school	2.00	2.00	1.00	1.17
Reading e-books for school	2.33	2.44	1.62	1.50
Browsing websites for school	2.50	2.14	1.40	1.35
Video chatting for school	2.00	2.33	1.83	1.90
Making own art or music	2.00	2.15	1.45	1.65
Writing something on a computer like a story	2.60	2.00	1.50	1.75
Reading online articles	2.17	2.00	1.36	1.48

Legend: 3.1-4.0 – More than 3 hrs; 2.1-3.0 – 1 to 3 hrs; 1.1-2.0 – 30 to 60 mins; 0.1-1.0 – less than 30 mins

The t-test result shows that overall digital media consumption mean score of the male and female respondents are not significantly different $t(75) = .789$, $p = .432$. However, looking at the individual digital media activities, there was a significant difference between males and females, t(60) = 2.523, p = 0.14 for instant messaging. In terms of educational attainment of parents, there is no significant difference between parents that are bachelor's degree graduates and post-graduates on the digital media consumption of children, different $t(75) = .628$, $p = .532$

Table 3 shows the mean score of the respondents from the grit questionnaire. Overall, the respondents are rated as Gritty (2.51). According to A.L. Duckworth (Duckworth et al., 2007), grit is a compound trait comprising of two factors – perseverance of effort and consistency of interest. For perseverance of effort, the categorical mean of 2.83 has a descriptive interpretation of 'mostly like me.' This implies that the respondents can somewhat relate to the statements pertaining to perseverance of effort, with 'I am a hard worker' resonating the highest.On the other hand, the categorical mean of 2.20 for consistency of interest has a descriptive interpretation of 'somewhat like me.' This implies that the respondents are somewhat inconsistent in pursuing interests.

Table 1. Level of Grittiness using Grit-S Questionnaire

Grit Indicators	Mean
Perseverance of Effort	2.83
Setbacks (delays and obstacles) don't discourage me. I bounce back from disappointments faster than most people.	2.41
I am a hard worker	3.03
I finish whatever I begin	2.92
I am diligent (hard working and careful)	2.96
Consistency of Interest	2.20
New ideas and projects sometimes distract me from previous ones	2.01
I have been obsessed (hooked) with a certain idea or project for a short time but later lost interest.	2.08
I often set a goal but later choose to pursue (follow) a different one	2.37
I have difficulty keeping my focus on projects that take more than a few months to complete.	2.34
Mean Total	2.51

Legend: 0.0-1.0 – Not Gritty at All; 1.1-2.0 – Slightly Gritty; 2.1-3.0 – Gritty; 3.1-4.0 – Extremely Gritty

Correlation Analysis reveal that there was no significant relationship between the overall Digital Media Consumption and Level of Grittiness, regardless of whether it was during Weekdays Non-School/School or Weekend Non-School/School.

However, exploring the correlation of individual digital media activities to grit, listening to music during weekdays for non-school purposes indicates significant positive weak correlation, $r(76) = 0.306$, $p<0.01$. On the other hand, listening to music during weekends for non-school purposes indicates significant negative weak correlation. $r(76) = -0.232$, $p<0.05$. This implies that listening to music during weekdays for non-school purposes positively correlates with grit but have an inverse effect during weekends. The use of social media and instant messaging for school purpose also indicates significant negative weak correlation during weekdays, $r(76) = -0.324$, $p<0.01$; as well as during weekends, $r(76) = -0.283$, $p<0.05$. This implies that using social media and instant messaging for school negatively correlates with grit.

5. Conclusion

This research shared how parents value digital devices and media as they now see it as a source of entertainment, relief from the pandemic, school partner, and source of learning. Although there is no consensus on the risks and rewards of connectivity, results of this research show that digital media exposure has its rewards in the form of actively feeding a child's curiosity. However, there are risks such as how it affects a child's patience based on parent's feedback. By embracing the digital era and proactively preparing for the changes brought by expanding technologies, children can be ready with relevant skill sets to protect themselves and equip them for the

next generation. The time to begin arming children for the challenges and demands of the future is when they are young. It is the responsibility of parents, educators, content providers, and policy makers to create relevant, yet responsible learning experiences and environments for children.

This research has revealed the extensive reach and penetration of digital devices and media in Filipino homes. The ownership and accessibility of digital media, coupled with digital media consumption habits and parent's feedback of its usage at home, prove how digital has captured their attention. Thus, capitalizing on this interest to propel development may be a compelling child-centered approach to learning. Based on this research, one of the best ways to instill grit to learn is to use what distracts them the most – digital technology. Parents and educators should be more open to a learning approach that provides opportunities for children to explore and test their skills online. The objective is to have multiple interesting and suitable options for children to absorb information. They should take an active mediation role in monitoring digital media content and consumption habits. Active mediation goes beyond monitoring the duration of use, this includes processing and having a discussion on the digital content being consumed.

On the other hand, policy makers should develop strategies that will address the spread of inappropriate content that may affect child development. Policy makers should devise ways by which the national education system can help educators' re-tool themselves on the best way to use digital media in the classroom and teach digital citizenship. Instead of using digital technology as an upgraded blackboard, this should be integrated purposefully into the curriculum. Successful utilization of digital technology depends not only on access to tools, but also on the availability of training and support for teachers, which policy makers should provide. Likewise, content creators should proactively create purposeful content that aims to develop positive skills in children rather than be a cause of distraction, which may be entertaining now but detrimental in the long term. Games and content must be properly tagged for its age appropriateness. The target age will also define how digital activities will be marketed to avoid a blanket advertising strategy that may attract young kids. Lastly, digital activities tailored for young children should be tested before claims on its benefit and outcome are made.

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