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# PREDICTORS OF FAMILY SCREEN TIME EXPOSURE AMONG STUDENTS IN SELECTED HIGHER EDUCATION INSTITUTIONS IN CENTRAL LUZON, PHILIPPINES

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#### **ABSTRACT**

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This study aims to determine the predictors of family screen time exposure among higher education students in Central Luzon, Philippines. This study used a descriptive correlation research design with the help of an online survey as the primary data-gathering tool. With the help of convenience sampling, 290 students voluntarily participated in the online survey. The proponents used a modified questionnaire which underwent validity and reliability (Cronbach Alpha = 0.90). For data analysis, the study used descriptive and inferential statistics with the help of SPSS 23. The study found that attitude ( $\bar{x} = 2.88$ ), expectation ( $\bar{x} = 2.76$ ), and family support ( $\bar{x} = 2.85$ ) got an "often" remarks from the respondents and only family opinion ( $\bar{x} = 2.37$ ) got a "sometimes" response. The available gadgets or devices of the respondents is one ( $\bar{x} = 1.78$ ) and they "often" observe family as model of screen time exposure ( $\bar{x} = 2.73$ ). Inferential statistics further confirmed the association between expectation (r = .336), opinion (r = .202), support (r = .167), the presence of gadgets (r = .265) with family as a model. Finally, the respondents' opinion (B = .451), support (B = .423), and the presence of gadgets and devices (B = .181) predicted the family as a model for screen time exposure. The researchers recommend important suggestions to students, family, faculty, and the institution in dealing with screen time exposure management.

Keywords: College students; family; predictors; screen time exposure

## 1. INTRODUCTION

Due to the devastating impact of the COVID-19 pandemic, students never imagined their lives would be the same again. The unprecedented event took its toll on everyone globally, especially the family. The family

is the cornerstone of society. As we now dwell in the 21st century, technological advancement and digitization of life are becoming relevant.

Screen time exposure has increased for the past decades due to the evolving innovation of technology. According to Jain et al. (2023), screen time exposure is the accumulated time spent by a person watching or using any digital or electronic device. Santos and Reeve (2020) also defined it as the sum of exposure to devices capable of video display like smartphones, tablets, computers, TVs, and consoles in video games. Furthermore, screen time is the cumulative time spent looking at or watching an electronic gadget's screen, including television, videos, computers, smartphones, video games, and tablets (Anuradha, 2019). Moreover, due to the effect of the pandemic, gadgets and device exposure arise in every household.

Screen time perspectives and concepts became an overnight sensation on the global scene. However, in this past decade, screen time exposure among individuals has already been in the spotlight. A growing body of literature associates excessive use of smartphones and digital media with physiological, psychological, social, and neurological adverse consequences (Lissak, 2018; Thomas et al., 2020) even in late adulthood (Neophytou et al., 2021). In addition, this event has a drastic effect on adolescents. Adolescents who spent more time on electronic communication and screens had lower psychological well-being (Twenge et al., 2018). These adolescents go to school as well and they need gadgets and devices in order to learn. Nevertheless, it has also brought them some drawbacks.

The desire to become a role model is also challenging in the family aspect. Due to the advancement and innovation brought about by technology, parents need help adjusting to it. Konca (2022) related that parents and home settings play a crucial role in their children's interaction with digital technologies. Because of this role, pressure is on with children's increased exposure to different screens at home. This apprehension reflected the perspective of Gupta et al. (2022), wherein the increased screen time and workload for their children became a significant concern for parents. As a result of the COVID-19 pandemic, the unprecedented changes caused everyone, including the family, work stress, and excess screen time exposure (Majumdar et al., 2020). High screen time accumulation is unavoidable for parents, primarily when they work remotely from home (Nagata et al., 2020).

In order to address the issue at hand, several pieces of literature gave their thoughts. Professional societies have already been updating the current guidance on screen time to support families in limiting excess screen time due to the pandemic (Nagata et al., 2020). Such action is imperative due to the health, social, and other related issues connected to it. Nevertheless, Domoff et al. (2019) said that family structure is an essential factor to consider in developing and testing interventions for managing screen time exposure in the family unit. Other literature also pointed out the idea of multiple family members engaging with their mobile devices while simultaneously being exposed to background media (Domoff et al., 2019). Therefore, family exposure is inevitable, especially during the pandemic period. Thus, parental mediation is imperative to control such phenomenon (Domoff et al., 2019; Lau & Lee, 2021) since this will result in a better outcome for the children. Niermann et al. (2018) also highlighted the different types of families. They found one where the level of physical activity and consumption of healthful foods is above average and media use and consumption of sweets below average. This result reflects the exposure of the family to screen time. Hence, the imposition of appropriate measures, like what Asut et al. (2019) highlighted, is the essence of a family school-based integrated approach to combat screen time, internet addiction, and other lifestyle behaviors among students. The risks involved in too much screen time in the family are an issue. Thus, appropriate measures at home and school call for appropriate attention.

In the Philippines, a previous article by Carandang (2021) disclosed that the average Filipino child spends around 34 hours a week viewing digital screens for entertainment purpose alone. This finding is 2 hours higher than the global average. In a recent report by Purnell (2023), Filipinos rank third in the highest average screen time exposure in the world with a 54.44 percentage. Some literature promulgated ideas regarding smartphone addiction of students (Buctot et al., 2020a; Buctot et al., 2020b) and managing children's digital technology misbehavior (Paguirigan & Paguirigan, 2022). Another literature also pointed out that the quality of children's close relationships showed a much stronger relationship with their life satisfaction than time spent on the internet (Kardefelt-Winther et al., 2020). However, other studies focus on parental involvement in the learning process (Tus, 2021) and distance learning (Agaton & Cueto, 2021). Based on these pieces of literature, only a few works of literature studied the family as a model for screen time exposure. At the same time, there is not enough literature focusing on this issue for higher-education students. Therefore, this study intends to carry out this investigation.

The main objective of this study is to analyze the family screen time exposure among college students. Specifically, the study examines the family's attitudes, expectations, family opinions, family support, and presence of gadgets and devices. In addition, the study also intends to discover the underlying factors that contributes to the family screen time exposure of college students.

The result of this study will benefit the students, their family, and their institution, especially when dealing with too much screen time exposure. On the other hand, counsellors can provide interventions and management schemes to counteract the harmful effects of too much exposure to gadgets and devices for students. Too much exposure to devices can also affect their academic performance in school.

# 2. MATERIALS AND METHODS

In this study, we used a descriptive-correlation research design. The primary instrument for data gathering is an online survey. Since the study aims to determine screen time exposure in the family phenomenon, descriptive research is appropriate. Furthermore, we also intend to evaluate some predictors relative to the family screen time exposure. Thus, a correlation design also fits.

The population for the study was students from the selected higher education institutions in Central Luzon, Philippines. Using a convenience sampling technique, 290 voluntary student respondents participated in the online survey. We surveyed for two months during the academic year of 2021–2022 since, during this time, face-to-face data gathering was impossible due to government restrictions, hence, the convenience sampling. For the basic information of the respondents, there were 188 females (n = 188) as compared to males (n = 102). Most of the respondents came from the city (n = 161) as compared to the province (n = 129). Most of the respondents were aged between 17–20 (n = 218), as compared to the age bracket 21–25 years old (n = 67) and 26 years old above (n = 5).

Inclusions for the online survey comprise: currently enrolled students of a duly recognized higher education institution in the Philippines. They must possess gadget (s) (e.g., smartphone or laptop) and internet connectivity.

For the instrumentation, we modified an instrument (Filho et al., 2021) to fit with the study's objectives. There were several sections in the instrument, including the demographic profiles, the attitudes and the expectations of the respondents, and the screen time exposure variables. We subjected the instrument to a validity and reliability test. It yielded an overall Cronbach alpha of 0.90. This coefficient was way beyond our benchmark score of 0.70 for the acceptability and reliability of the instrument.

In addition, for the data analysis, we employed the following statistical treatments: frequency, percentage, and mean for the descriptive analysis. On the other hand, we also used Pearson-r Moment of Correlation and Regression Analysis for the inferential statistics. We used different statistical tools with the help of software. The Statistical Package for Social Sciences (SPSS) version 23 calculated the intended output of the study. Furthermore, we patterned the responses of the student-respondents to a four (4) point Likert scale presented in every table.

## 3. RESULTS

This study aimed to analyze the family screen time exposure of college students. It also determined the relationships between the involved variables in the study. Finally, the study also tried to find the predictor for the family screen time exposure to provide more information regarding this particular segment. The succeeding tables present the results of the study.

 Table 1: Attitudes to Reduce Gadget Screen Time Exposure of Respondents

	Item	Mean	Interpretation
1.	Decreasing the time in front of the smartphone, computer, laptop, or tablet is essential for you.	2.88	Often
2.	Decreasing time in front of a smartphone, computer, laptop, or tablet is boring or fun for you.	2.57	Often
3.	Decreasing the time in front of the smartphone, computer, laptop, or tablet is good or bad for your health.	3.18	Often
	Overall Mean	2.88	Often

Legend: 1.00–1.50 = Never; 1.51–2.50 = Sometimes; 2.51–3.50= Often; 3.51–4.00 = Always

Table 1 presents the results of a survey that aimed to understand the attitudes of the respondents toward reducing their exposure to gadget screens. The overall mean score across all three items is 2.88, which corresponds to an interpretation of "often." This result means the respondents generally believe that reducing their exposure to gadget screens is important, although they may have mixed feelings about it and perceive it differently in terms of its impact on their health.



In addition, the third item generated the highest mean score with 3.18, which corresponds to an interpretation of "often." This indicates that most respondents believe that reducing screen time is good for their health. The second highest mean was item one with a score of 2.88 which also equates to a descriptive interpretation of "often". Such result shows that most respondents think that reducing their screen time is important to some extent, but not necessarily all the time. Lastly, the second item got the lowest mean score of 2.57 which also falls under the interpretation of "often." This suggests that most respondents have mixed feelings about reducing screen time, and they may perceive it as both boring and fun at different times.

**Table 2:** Expectations in Screen Time Exposure of Respondents

	Item	Mean	Interpretation
1.	It is very relaxing when I sit and browse in front of a smartphone/computer/laptop/tablet.	2.88	Often
2.	I feel good (happy) when I am with my smartphone/computer/laptop/tablet (talking or playing) or playing online games.	2.95	Often
3.	I get excited (agitated) when I use my smartphone/computer/laptop/tablet.	2.79	Often
4.	Using my smartphone/ computer/laptop/ tablet is my way of connecting to the world (making friends).	3.04	Often
5.	My friends would be sad if I shortened my time talking to them on my smartphone/computer/laptop/tablet.	2.29	Sometimes
6.	I like to browse my smartphone/computer/laptop/tablet or play online games for many hours at a time.	2.58	Often
7.	Browsing my smartphone/computer/laptop/tablet or using my smartphone/computer/laptop/tablet for online games is one of the things I enjoy doing in my leisure time.	2.74	Often
8.	I browse my smartphone/ computer/laptop/tablet or use my smartphone/ computer/laptop/tablet to escape the world (obligations, discussions, problems).	2.62	Often
9.	Browsing my smartphone/computer/laptop/tablet or using my smartphone/computer/laptop/tablet traps me from doing important things (studying, eating).	2.68	Often
10.	I get lazy after spending many hours in front of my smartphone/computer/laptop/tablet.	2.73	Often
11.	I feel pain in the body (back, legs) after spending many hours in front of my smartphone/computer/laptop/tablet.	2.97	Often
12.	Browsing my smartphone/computer/laptop/tablet or playing online games burns my eyes and leaves me with a headache.	2.91	Often
	Overall Mean	2.76	Often

Legend: 1.00–1.50 = Never; 1.51–2.50 = Sometimes; 2.51–3.50 = Often; 3.51–4.00 = Always

Table 2 shows the expectations for the screen time exposure of the respondents. As seen from the result of the mean calculation, most of the respondents answered: "often" In general, the overall mean generated was 2.76. This result corresponded to a Likert interpretation of "often" This only implies that the respondents generally have expectations that using their gadgets can have both positive and negative effects on their well-being and daily lives.

In addition, item 4 disclosed the highest mean score, corresponding to a Likert scale interpretation of "often". This result suggests that most respondents believe that using their gadgets is relaxing, makes them happy, helps them connect with the world, and is an enjoyable leisure activity. On the other hand, it was item 5 that got the lowest mean score of 2.29 which corresponded to an interpretation of "sometimes". This finding implies that some respondents think that their friends would be sad if they reduced their screen time, but this is not a widespread expectation.

 Table 3: Family Opinions on Screen Time Exposure of the Respondents

	Item	Mean	Interpretation
1.	The people in my house think browsing smartphones/computers/laptops/tablets are excellent.	2.37	Sometimes
2.	The people in my house prefer to sit with their smartphones/computers/laptops/tablets rather than do physical activity.	2.21	Sometimes
3.	The people in my house think it is safer for me to stay at home with my smartphone/computer/laptop/tablet rather than do a physical activity outside the home.	2.53	Often
	Overall Mean	2.37	Sometimes

Legend: 1.00–1.50 = Never; 1.51–2.50 = Sometimes; 2.51–3.50 = Often; 3.51–4.00 = Always

Table 3 depicts the result of the mean calculation for the family opinions on a screen time exposure of the respondents. The study obtained an overall mean score across all three items is 2.37, which falls under the

interpretation of "sometimes." This result only means that the respondents generally have mixed feelings about their family's opinions about gadget use and its impact on physical activity and safety.

Conversely, it can be reflected from the table that item 3 got the highest mean with a score of 2.53 which corresponds to an interpretation of "often". On the other hand, item 2 generated the lowest mean score of 2.21 which reflects an interpretation of "sometimes". This result only implies that the respondents have varied state of mind about their family's preference for gadget use, and they do not necessarily believe that their families always prefer to sit with their gadgets rather than engage in physical activity.

**Table 4:** Family Support in Reducing Screen Time Exposure of the Respondents

	Item	Mean	Interpretation
1.	The people in my house encourage me to decrease the time browsing my smartphone/computer/laptop/tablet.	2.98	Often
2.	The people in my house say that much time in front of my smart phone/computer/laptop/tablet can harm my health.	3.06	Often
3.	The people in my house help me think about how to decrease the time in front of my smartphone/computer/ laptop/tablet.	2.83	Often
4.	The people in my house praise me when I spend less time in front of my smart phone/computer/laptop/tablet and more time doing physical activity.	2.81	Often
5.	The people in my house prevent me from browsing my smartphone/computer/laptop/tablet when I do something wrong.	2.58	Often
	Overall Mean	2.85	Often

Legend: 1.00–1.50 = Never; 1.51–2.50 = Sometimes; 2.51–3.50 = Often; 3.51–4.00 = Always

Table 4 represents the mean result for the family support in reducing screen time exposure of the respondents. It can be gleaned from the table that the overall mean score across all five items is 2.85, which is interpreted as "often." This result only means that the respondents generally have a perception of high family support in reducing their exposure to gadget screens.

In addition, the second item generated the highest mean with a score of 3.06 which equates to "often" in the Likert interpretation. This finding implies that most respondents believe that their families often express concern about the potential harm that excessive screen time exposure can cause to their health. However, it was the fifth item that yielded the lowest mean score of only 2.58. Nevertheless, this score also corresponds to a descriptive interpretation of "often." This also suggests that most respondents believe that their families often prevent them from browsing their gadgets when they do something wrong.

**Table 5:** Gadgets and Devices Present at the Home of the Respondents

	Item	Mean	Interpretation
1.	Number of cellular/smartphone(s)/tablet(s) at home	3.33	Two
2.	Number of smart television(s) at home	2.00	One
3.	Number of computer(s) with internet access at home	1.84	One
4.	Number of computer(s) without internet access at home	1.21	Does not Have
5.	Number of smart television(s) in the bedroom	1.35	Does not Have
6.	Number of laptop(s) in the bedroom	1.78	One
7.	Number of computer(s) with internet access in the bedroom	1.47	Does not Have
8.	Number of computer(s) without internet access in the bedroom	1.16	Does not Have
9.	Number of internet access source(s) (prepaid/ postpaid) at home	1.90	One
	Overall Mean	1.78	One

Legend: 1.00-1.50 = Does not Have; 1.51-2.50 = One; 2.51-3.50 = Two; 3.51-4.00 = Three or More

Table 5 presents the gadgets and devices present in the respondents' homes. Based on the presentation, the overall mean was 1.78 which equates to an interpretation of "one." This score means that the respondents generally have one of each gadget and device present at their homes, except for cellular/smartphone/tablet devices and laptops, where they have two and one respectively.

We can also deduce that item 1 generated the highest mean score. This score represents the actual number of devices at home was two. However, there were also items the respondents did not have, as seen from items 4, 5, 7, and 9. This result means that the respondents have fewer screens and devices in their bedrooms, with most not having a computer or smart television in their bedrooms.



**Table 6:** Family as a Model for Screen Time Exposure of the Respondents

	Item	Mean	Interpretation
1.	Do your parents (mother and father) browse their smartphones/computers/laptops/tablets?	2.67	Often
2.	Do other people in your household browse smartphones/computers/laptops/tablets?	3.10	Often
3.	Do you and your parents browse smart phones/computers/laptops/tablets together?	2.51	Often
4.	Do you and others in your household browse smart phone/ computer/ laptop/ tablet together?	2.63	Often
5.	Do your parents use their smartphones/computers/laptops/tablets?	2.78	Often
6.	Do other people in your household use smartphones/computers/laptops/tablets?	3.02	Often
7.	Do you and your parents use smartphones/computers/laptops/tablets together?	2.51	Often
8.	Do you and others in your home use smartphones/computers/laptops/ tablets together?	2.59	Often
	Overall Mean	2.73	Often

Legend: 1.00–1.50 = Never; 1.51–2.50 = Sometimes; 2.51–3.50 = Often; 3.51–4.00 = Always

Table 6 illustrates the mean result for the family screen time exposure of the respondents. Based on the survey result, in general, the overall mean was 2.73 which garnered a descriptive interpretation of "often" in the Likert scale. The result discloses that the respondents generally perceive that their family members often use gadgets and often use gadgets together.

Furthermore, item 2 garnered the highest mean score of 3.10 and items 3 and 7 obtained the lowest score with 2.51. Nevertheless, the mentioned scores still fall under the descriptive interpretation of "often" in the Likert scale. At the same time, the result also implies that his suggests that most respondents believe that they often use gadgets with their parents.

Table 7: Correlation Matrix Between the Screen Time Exposure Variables and the Family as a Model

	1	2	3	4	5	6
Attitudes	1					
Expectations	.034	1				
Family opinions	105	.389*	1			
Family Support	.200*	.169*	.012*	1		
Presence of Gadgets and Devices	.052	.029	098	.018	1	
Family as a Model	.107	.336*	.202*	.167*	.265*	1

*Note.* \*p < .05; N = 290

Table 7 depicted the correlation matrix between the screen time exposure variables and the family as a model using the Pearson-r Moment of Correlation test. It can be gleaned from the table that family as a model correlated significantly with expectations toward screen time exposure, family opinions about screen time exposure, family support on screen time exposure, and the presence of gadgets and devices at home. The study obtained the following r-values: .336 (expectations); .202 (family opinions); .167 (family support); and .265 (presence of gadgets and devices), respectively. All of their probability values were lower than the alpha significance level of .05. Therefore, we concluded that there is a low positive relationship between expectations toward screen time exposure, family opinions about screen time exposure, family support on screen time exposure, and presence of gadgets and devices at home and family as a model. The result further implies that considering the family as a good model to follow associates with having high expectations for the family's behavior, believing in the importance of family values and opinions, having more family support, and having a positive attitude toward screen time.

Table 8: Regression Analysis between the Screen Time Exposure Variables and Family as a Model

Model	Unstandard	ized Coefficients	Standardized Coefficient	t	Sig
	В	Std. Error	Beta	_	
(Constant)	315	.370		852	.395
Attitudes	.087	.060	.079	1.454	.147
Expectations	.451	.103	.255	4.378	.000
Opinions	.181	.077	.136	$2.342^{*}$	.020
Support	.127	.068	.101	1.860	.064
Presence of Gadgets and Devices	.423	.085	.265	$4.888^{*}$	.000

Note. F(5, 285) = 15.064; \*p < .05;  $R^2 = .209$ 

Table 8 displays the linear regression analysis to verify if the screen time exposure variables significantly predict the respondents' family as a model. The result of the regression analysis has a statistically significant F(5, 285) = 15.064, p < .05 and an R-squared value of .209, indicating that the predictors in the model explain 20.9% of the variance in family as a model. The study found that expectations toward screen time exposure significantly predicted the family as a model (B = .451, p < .05), same as the presence of gadgets and devices at home (B = .423, p < .05) and family opinions about screen time exposure (B = .181, p < .05). Therefore, based on the result of the regression, the results suggest that expectations, opinions, and presence of gadgets and devices are significant predictors of family as a model, while attitudes and support have weaker associations with family as a model.

## 4. DISCUSSIONS

Screen time exposure has never been this high since the dawn of technological progress when humans developed new gadgets and devices that would help them in their lives. This paper revealed some interesting results that may provide essential information for future comparisons and perspectives.

For the attitude to reduce screen time exposure the respondents, the majority of them agreed to the different items involved in the study. This result means they are adamant about practicing less screen time and doing more physical activities at home or school. It is essential to move around from time to time because of some possible health risks involved due to the immobility of our bodies. Concerning this result, Nhatuve and Madzokere (2022) confided that prolonged screen time exposure might lead students to experience physiological and psychological disturbances. The same goes for the findings of Maras et al. (2015) in their study, where screen time may represent a risk factor for anxiety and depression among adolescents. In the local context, Colambo (2022) showed in his paper the relationship of digital screen time exposure among students and their well-being and behavioral change.

For the respondents' expectations for a screen time exposure, they also agreed on the different notions regarding using devices and gadgets and how these affect the respondents' families e.g., physical pains like headaches or back pains due to prolonged browsing of the gadget or device. Studies show that excessive use of gadgets or devices may lead to physical problems (Nhatuve & Madzokere, 2022). It may also affect their sleep patterns (Lissak, 2018; Cabré-Riera et al., 2019), because sometimes students stay late because of school requirements or chat with their friends or classmates. On the other hand, in the perspective of Narsico and Flores (2023), exposure to screen time activity is not as detrimental to academic productivity of the students in the family.

However, as for the family opinions on screen time exposure, the respondents answered the opposite. In a related paper by Anuradha (2019), the proponent stated that parents should ensure their family schedule to not interfere with by screen time. However, due to unavoidable circumstances, like living with a single parent or reconstituted families, this situation unfavorably associates with screen-based behaviors among youth (Langøy et al., 2019). This finding is against some basic principles a family has within their home. Nevertheless, the respondents still answered on the affirmative side regarding family support in reducing screen time exposure of the respondents. This result only means that the respondent's family has the initiative to limit or manage their screen time exposure at home. Domoff et al. (2019) had the same sentiments since parents and children tend to negotiate their screen time limit. It is also evident in the study of Thomas et al. (2020) that family and friends influence the screen time exposure of adolescents directly and indirectly. In addition, Eyimaya and Irmak (2021) emphasized the importance of parents setting ground rules for their children, especially with their screen time exposure. In a local perspective, Naval et al. (2020) exposed that children in their study have an average of five hours of screen time and children with dysfunctional families were 1.23 times more likely to have an excessive amount of screen time than those with highly functional families.

On average, at least one device or gadget is available in every household of the respondents. This number is acceptable since not all families can acquire sophisticated devices or gadgets for leisure and entertainment due to limited financial capability. In relation, in the study of Cabré-Riera et al. (2019), they pointed out the consequences of phone calls, cell phone dependency, and tablet use. The more devices or gadgets available at home, the more the tendency that students will be tempted to use them. However, Budhrani et al. (2021) discussed the importance of parental balancing duties and emphasized that the parents serve as the digital classroom managers that organize schedules, assist in assignments, and participates in online chat groups.

Regarding the family as a model for screen time exposure, the respondents often observe such traits and practices in their households. This phenomenon manifests how much a child, adolescent, or adult is exposed in front of the screen of different devices and gadgets at home. To support the finding, Buctot et al. (2020a) stated that the execution of rules governing smartphone use at home and in schools should be



implemented. The less time students spend on electronic screens (gadgets or devices), the lower the tendency to experience psychological effects (Browning et al., 2022). By this virtue, it is vital to impose such rules and regulations to protect students' sanity.

Finally, for the results of the inferential statistics, there was a direct association between family as a model, expectations toward screen time exposure, family opinions about screen time exposure, family support on screen time exposure, and the presence of gadgets and devices at home. Furthermore, expectations toward screen time exposure, family opinions about screen time exposure, and the presence of gadgets and devices at home significantly predicted family as a model for screen time exposure. The current result supports the findings of Dy et al. (2023) wherein when parents watch excessively, the odds are, children's screen time also increases. This result is supported by the study of Thomas et al. (2020), wherein family, directly and indirectly, influences adolescents' screen time exposure. In a local study by the group of Garcia-Bolaños et al. (2022), they mentioned that screen time can increase student's level of happiness. Overall, this study has proven that family influences screen time exposure to some extent to students. Some factors contributed significantly to exposing students to gadgets and devices, especially at home. Specific actions and family guidance must be imposed accordingly.

## 5. CONCLUSIONS

Based on the results and discussions of the study, we, therefore, conclude the following:

- 1) The respondents often reduce their screen time exposure. They also often have different expectations about reducing screen time exposure in the family. However, the respondents sometimes have varied family opinions about screen time exposure. Nevertheless, they often provide family support for reducing screen time exposure. On average, at least one gadget or device is present in every respondent's home. Finally, the respondents often see that the family can be a model for screen time exposure.
- 2) There is a low to moderate, direct relationship between expectations, opinions, support, the presence of gadgets, and family as a model.
- 3) The respondents' opinions, support, and presence of gadgets and devices predict the family as a model for screen time exposure.

# 6. RECOMMENDATIONS

From the abovementioned results, the study at this moment recommends the following:

- 1) Students should have a time management scheme or program to deal with their over-dependence on gadgets and devices.
- 2) Have a screen time audit at home with all the devices and gadgets to set standards and relative rules and regulations on when and how long to use.
- 3) The parents should enforce family physical activities and set up a particular hour of the day for screen time off for everybody and spend time with everyone.
- 4) There should be a designated area (like a dining or bedroom) in the house where devices and gadgets are not allowed or prohibits use of such.
- 5) The school must provide an alternative for screen time like books, gardening, cooking, and other school activities that stir interest and skills among the students.
- 6) Provide a comprehensive seminar and family counseling regarding screen time management at home and even in school.
- 7) For the faculty, provide some "gadgetless" lessons or activities in the classroom to encourage physical movements in the class from time to time.

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