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INTRODUCTION

In today's technology driven world, electronic devices have become a staple of everyday life. Whether used for work or personal entertainment, these devices influence and shape the way we think, in both deliberate and unintentional ways.

While aimed primarily at the adult population, an increasing number of tech-savvy children are using these devices, whether it be to supplement their education or to play games. This is widely apparent with many children having access to their own/shared family devices or parent-owned devices. Quantitative evidence and regional trends regarding device use among children living in the Southeast Asian region remain limited.

This study helps fill this gap in research by exploring how children are exposed to these devices, and what parents are doing to monitor their usage. It is a modest but meaningful step in the road to providing reliable data to form a deeper understanding of children's device usage across the SEA region.

This study examines Southeast Asian parents with children between the ages of 3 and 8-years- old and their opinions on content censorship, monitoring and concerns in relation to their children's device usage, as well as their motivations to allow initial device usage.

Primary Research Questions

- To what extent do parents allow their children to use devices and how do they monitor their usage?
- How often do children use devices, and at what time of day?
- What type of content do children consume via devices? How does this compare with content that parents want their children to consume?
- What are parents' motivations behind allowing their children to use devices?
- What are the main concerns of parents with regard to their children's device usage?
- What types of parental controls do parents want for monitoring device usage?

KEY FINDINGS

Ninety-eight percent of parents in Southeast Asia allow children to use devices.

The majority of parents show little hesitation in allowing their children to use a device, despite common perception that prolonged device use may have a negative influence on children. Across SEA, 67% of children use a parent-owned device. At 71%, Singapore has the highest number of children aged 3- to 8-years-old using a parentowned device; whereas in the Philippines, only 58% of children use their parents' devices. The most popular devices used by children are Apple (40%) and Samsung (38%). Samsung is the more popular choice in Malaysia, Indonesia and the Philippines.

2.

The primary motivation of parents for allowing their children to use devices is to supplement their education.

Parents highly value their children's education, as proven by the 80% who give their children access to devices predominantly for educational purposes. Aside from using devices as a supplement to their children's education, parents let children use devices to give them early exposure to technology (68%), provide entertainment (57%) and keep them quiet/busy (55%). Parents in the Philippines give more importance to these motivations, compared to other countries: supplement to education (92%), early exposure to technology (79%), entertainment (75%) and to keep children quiet/busy (70%).

3. Children use devices mainly for gaming, videos and educational apps.

As previously noted, parents allow their children to use devices with the primary intention of supplementing education. However, as the data reveals, there is a disparity between what parents want their children to use the devices for and what children actually use them for. Children aged 3- to 5-years-old use devices for gaming (25% vs 29%) and education (26% vs 27%) at similar levels. The older segment of children aged 6- to 8-years-old use these devices more for gaming (29% vs 37%) and less for education (20% vs 22%).

4. Children are most likely to use a device for over 1 hour per sitting.

While many parents in this study allow device usage by their children, most of them also believe in exercising limits and boundaries when it comes to screen time. Sixty-five percent of parents in SEA let their children use devices some of the time and 19% only in certain circumstances. The usage time of children increases with age: only 30% to 33% of 3- to 5-year-olds use devices for more than an hour in each sitting compared to 49% to 51% of 6- to 8-year-olds.

5.

Parents' top three concerns on their children's use of devices are, exposure to inappropriate content, impact on health and addiction to devices.

The biggest concern for parents is the impact of device use on their children's health (92%). This is followed by addiction to devices (90%) and access to inappropriate content (88%). To a lesser extent, parents are also concerned about high phone bills (67%) and damage to devices (60%). The level of concern differs among countries. Children's health is the biggest concern in Thailand (99%), addiction to devices in Singapore (94%) and inappropriate content in Indonesia (95%). These three concerns are the least in the Philippines where 82%, 77% and 75% of the parents rated each of them important, respectively.

6.

Devices are used by children mostly at home and least used in school.

Children's device usage is mostly at home (99%) and the least in school (17%). Devices are sometimes used in restaurants (70%), while travelling (71%) or at a friend's place (40%). Usage in school is low due to several reasons. Firstly, most children use their parents' devices which are not available at school. Secondly, mobile/online education is at a nascent stage globally and its inclusion into the school curriculum in Asia will take some time. Lastly, parents and teachers do not currently allow their usage in school due to the almost impossible nature of monitoring a large group of children while they use such devices.

Parents are the primary users who police their children's

device usage.

Although most parents allow device usage by their children, 77% of them personally monitor what their children consume and view on their devices. Only 11% allow other family members to monitor their children, while 2% do not monitor at all. Parents in Thailand are the biggest device monitors at 89%, whereas parents in Singapore are the least active monitors (74%).

8.

Parents would like devices to include control mechanisms to help them monitor their children's device usage.

Parents are concerned about what their children view on their devices and ensuring that there is no risk of exposing them to inappropriate content. Given this, content filtering and other ways of exercising parental control (e.g. being able to control time of device usage) are very important for all parents. Ninety-four percent of SEA parents wish their device included parental control mechanisms. While there is a slight variation, the desire to have this control is high for parents in all SEA countries: Thailand (97%), Indonesia (96%), Malaysia (94%), Singapore and the Philippines (93%).

9.

Setting a time limit, preventing in-app purchases and monitoring usage progress are the most desired features in a device by parents.

Apart from presenting the risk of addiction and other health problems, prolonged device use by children also raises financial concerns among parents. This is in relation to parents' desire to prevent in-app purchases that often accompany gaming apps. At 74%, setting a time limit for usage is the top parental control feature parents desire in a device. Preventing in-app purchases and monitoring usage/progress are the secondary features at 68%.

10.

Thirty percent of parents are willing to pay for children's apps.

While these parents have financial concerns related to their children's device usage, especially with regard to in-app purchases, they are still willing to pay for an app as long as it provides superior educational value and allows the flexibility of parental control. This reflects the main motivation for why parents allow their kids to use devices: to supplement their education.

11.

Parents of 6- to 8-year-olds are more motivated to let their children use devices than parents of 3- to 5-year-olds.

Parents of 6- to 8-year-olds give more importance to "early exposure to technology" than parents of 3- to 5-year-olds (69% vs 56%). Similarly, the former also does so for "supplement to school education" (82% vs 73%), "entertainment" (56% vs 49%) and "keeping children quiet/busy (55% vs 52%). However, as children grow older and start spending more time on their devices, parents of the older children segment (75%) become more concerned about high phone bills than parents of the younger children segment (63%) and the type of content their children are exposed to.

12.

Stay-at-home mothers give more importance to the use of devices than working mothers do.

There are noticeable contrasts between how stayat-home mothers and working mothers rate the importance of device use for education (83% vs 77%), entertainment (63% vs 53%), keeping children quiet/busy (58% vs 52%) and early exposure to technology (70% vs 66%).

13.

Parents who allow their children to have their own or have access to family shared devices show lower levels of concern about device usage than parents who do not.

Data from this study reveal that the percentage of parents who permit their children to have free access to devices versus parents who do not, differs very slightly with regard to their concerns over exposure to inappropriate content (88% vs 89%), impact on health (92% vs 93%), damage to devices (59% vs 61%), addiction (87% vs 90%) and high phone bills (67% vs 68%). Interestingly, they differ much more in their motivations to allow device usage by their children: early exposure to technology (75% vs 66%), supplement to education (88% vs 77%), entertainment (64% vs 55%), and keeping children quiet/busy (59% vs 53%).

METHODOLOGY

This report is based on children's consumption of devices in Southeast Asia, a regionally representative quantitative study of 2,714 Southeast Asian parents with at least 3,917 children aged between 3 and 8 years. This is one of the first studies that focuses on device usage among kids in this region.

The key findings and all numeric data in the report are based on the results of this study, which was conducted by the Asian parent Insights group of the Asian parent.com, Southeast Asia's largest online parenting website. The report was commissioned by Samsung Kidstime™ in the interest of identifying real parental concerns for children's device usage.

Participants contacted through the Asian parent. com's various localised websites, social media pages and newsletters. Using the Asian parent.com's existing database, respondents were also contacted via email to participate in the survey.

Participant selection criteria included being a resident of one of the identified Southeast Asian countries (Singapore, Malaysia, Thailand, Indonesia and the Philippines) and being a parent of at least one child aged 3 to 8 years. To ensure that all respondents fit the participant selection criteria, they were initially asked if they were a parent of at least one child aged 3 to 8 years. A "no" response terminated the survey.

Data was collected during the period of August 19-29, 2014 in Singapore, Malaysia, Thailand Indonesia and the Philippines. Data was also collected from outlying countries (e.g., India, China, Hong Kong, Pakistan, Taiwan, Myanmar,

Laos, Pakistan, Cambodia and South Korea); however, this data was not statistically significant.

To ensure ease of questionnaire use and maximum comprehension levels for all participants, study questions were offered in English, Thai, Bahasa Indonesia and Bahasa Melayu.

Results of the report are based on data acquired from self-administered surveys filled out via the online study platform, QuestionPro, a web-based software for creating and distributing surveys.

QuestionPro was selected as the data collection tool for this project as it enabled data collection from a large sample (such as that of this project) with ease, which in turn facilitated data analysis and ensured a rigorous research process. The margin of error for the full sample is +/-4.0 percentage points with a confidence level of 95%.

Percentages may not total 100 due to rounding or refused/don't know responses, or because multiple responses were allowed.

Where "families" and "parents" are referred to in this report, these are in reference to parents with children within the specified age range (3 to 8 years). Where "children" are referred to in this report, these are references to children in Southeast Asia between the ages of 3 and 8 years.

"Devices" refer to a smartphone and/or tablet, e.g. Apple iPhone and iPad, Samsung Smartphone and Tablet, Blackberry Smartphone, Nokia Smartphone, etc. (please see Appendix for full details).

"Own device" refers to a device that is used and

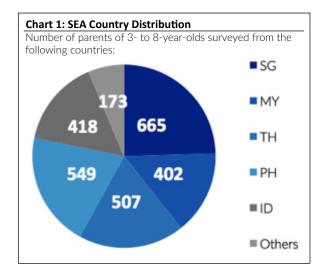
owned solely by one child. "Shared family device" refers to a device that does not have a specific designated owner. "Parent-owned device" refers to a device that is owned by one parent or both parents.

Quotes used throughout the report were extracted from open-ended questions in the online study and are included in this report where relevant.

The full text of the questionnaire and all topline results can be found in the Appendix.

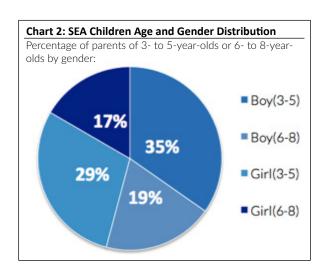
SECTION 1: SOUTHEAST ASIA STUDY OVERVIEW

This study is one of the first to examine device usage among children in Southeast Asia. Data was collected from 2,714 parents across 5 countries in this region: Singapore (665), Thailand (507), the Philippines (549), Malaysia (402), Indonesia (418) and other outlying countries (173).



Study participants are parents with 3- to 8-yearold children. The entire sample of parents has at least 3,917 children in the 3- to 8-year-old age segment. There is a fairly equal representation of both genders across the total study sample of children, with 54% boys and 46% girls.

Children's age and gender. The categories of children's age and gender are broken down further to provide more detailed data analysis and comparisons between age groups. Sixty-four percent of the children in this study are 3- to 5-year-olds, of which 35% are boys and 29% are girls. Thirty-six percent of the children in this study are 6- to 8-year-olds, which has a more equal representation of gender with 19% boys and 17% girls.

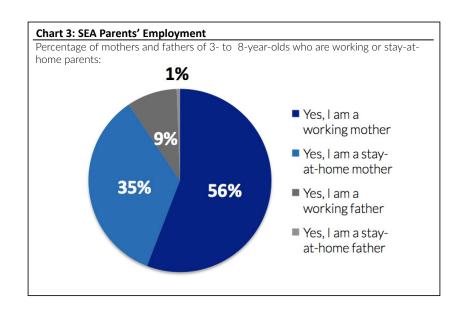


Of the parents in this study, over two-thirds (72%) have one boy in the 3- to 5-year-old age segment and a little over half (58%) have one boy in the 6to 8-year-old age segment. Similarly, two-thirds (70%) have one girl in the 3- to 5-year-old age segment and 57% have one girl in the 6- to 8-yearold age segment.

Number of children per family in the 3- to 8-yearold segment. Approximately one third (31%) of the parents surveyed in this study have one child, and 67% have more than one child within the 3- to 8-year-old segment. This trend is also apparent in each SEA country, with each country having more than 50% of parents with only one child that is 3 to 8 years.

Thailand has the highest percentage (77%) of parents with only one child in this age segment, while Indonesia has the lowest (57%).

Parents' employment. The majority of respondents consist of mothers (91%). Among these mothers, 56% consider themselves "working mothers". Fathers comprise slightly more than 9% of the entire sample represented in this study.



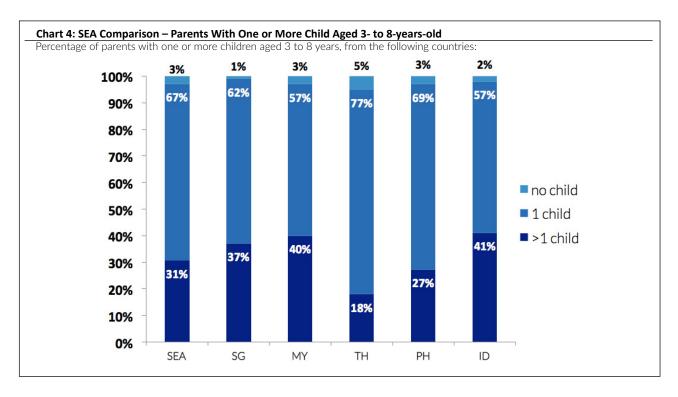


Chart 5: SEA Parents' Number of Children Percentage of gender and number of children among parents of 3- to 8-year-olds:										
Number of Children	Boy (3-5)	Boy (6-8)	Girl (3-5)	Girl (6-8)						
1	72%	58%	70%	57%						
2	5%	6%	5%	3%						
3	2%	0%	1%	0%						
4	1%	0%	1%	0%						
>4	1%	2%	1%	2%						
None	20%	34%	22%	38%						

SECTION 2: PARENTAL MOTIVATION FOR ALLOWING CHILDREN'S **DEVICE USAGE**

Across the region, parents' motivations for allowing their children to use devices differ. When it comes to why parents allow device usage by their children in the first place, education takes a central focus, with the majority of parents (80%) allowing their child to use a device as a supplement to school education. This is followed by early exposure to technology (68%), entertainment (57%) and to keep their children quiet/busy (55%).

In comparison to parents whose children only use parent-owned devices, about 5% to 15% more parents, whose children use their own/ shared family devices, give importance to the four parental motivations highlighted in this study for allowing device use by their children. Following are the figures (children who use their own/shared family devices vs children who use parent-owned devices): early exposure to technology - 75% vs 66%; supplement to school education - 88% vs 77%; entertainment - 64% vs 55%; and keeping children quiet/busy - 59% vs 53%.

Education. In all SEA countries, the principal parental motivation for allowing device use by children is education. When discussing the use of devices in conjunction with learning, parents in the Philippines give significantly more importance (92%) to children's use of devices as a "supplement to school education," when compared to the other countries, Thailand (80%), Malaysia (79%), Singapore (73%) and Indonesia (74%).

Stay-at-home mothers (83%) give more importance to devices as a supplement to education than working mothers (77%) do. Eighty-two percent of parents of 6- to 8-year-olds also give more importance to devices as a "supplement to school education" compared to 73% of parents of 3- to

5-year-olds.

Early exposure to technology. Across the five countries in this study, parents in the Philippines (79%) give early exposure to technology the most importance, while parents in Singapore (54%) give it the least importance.

Interestingly, parental motivation for allowing children to use devices differs according to whether mothers are working or stay-at-home. Stay-at-home mothers (70%) give slightly more importance to "early exposure to technology" as a motivation for letting their children use a device than working mothers (66%) do.

Parents of 6- to 8-year-olds (69%) give significantly more importance to "early exposure to technology" than parents of 3- to 5-year-olds (56%) do. This trend highlights parental acknowledgement of the importance of technological know-how among children as they grow older.

Entertainment. While parents in the Philippines are the most motivated to give their child a device for educational purposes, they also give the most importance to device usage for entertainment (75%), followed by Thailand (67%), Indonesia (60%) and Singapore (46%). Malaysia gives the least amount of importance to using devices for childrens' entertainment purposes (38%).

Overall, 63% of stay-at-home mothers consider device use for entertainment important, whereas only 53% of working mothers think similarly. Fifty-six percent of parents of 6- to 8-year-olds give importance to entertainment versus 49% of parents of 3- to 5-year-olds.

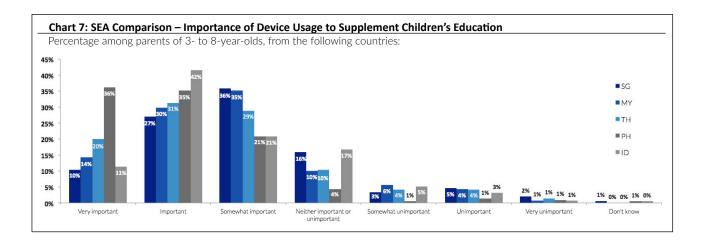
To keep children busy/quiet. Over half of the parents in this study allow their children to use devices to keep them occupied and quiet (54%). Parents in the Philippines rate "keeping children quiet/busy" as the most (70%) important function of device use, while parents in Indonesia rate it as the least important (41%), followed by parents in Thailand (45%).

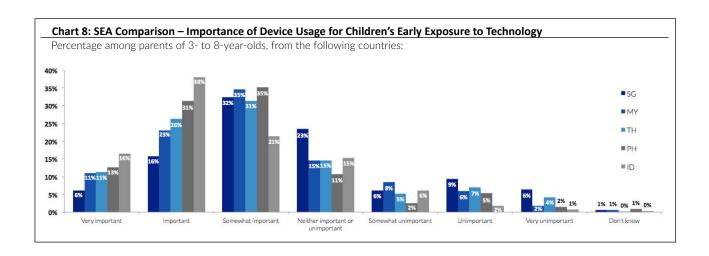
Stay-at-home mothers (58%) also believe in using devices to keep their children quiet or busy significantly more than working mothers (52%) do.

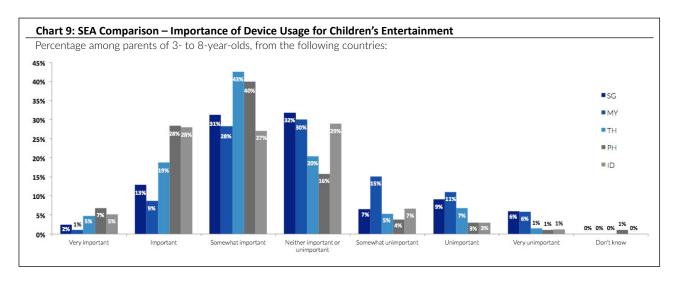
There appears to be a correlation here between stay-at-home mothers allowing their children to use devices for entertainment and to keep them busy/quiet, as stay-at-home mothers generally spend more time with their children than working mothers do.

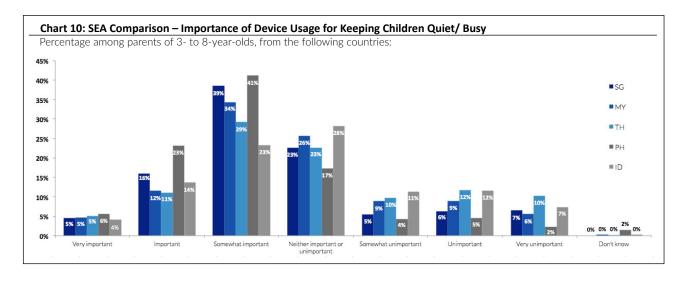
However, in relation to the parents of children belonging to the two different age segments, there is a consensus among them: 52% of parents of younger children (3- to 5-year-olds) and 55% of parents of older children (6- to 8-year-olds) admit to allowing device use by children as a means to keep them quiet or busy.

rcentage of parents of 3- to	8-year-olds by importan	ce of motivations for allowing	ng their children to use	devices:
Importance	Early exposure to technology	Supplement to school education	Entertainment	To keep them quiet/ busy sometimes
Very important	11%	19%	4%	5%
Important	26%	33%	19%	16%
Somewhat important	31%	28%	34%	34%
Neither important or unimportant	16%	12%	25%	23%
Somewhat unimportant	6%	4%	7%	7%
Unimportant	7%	4%	7%	8%
Very unimportant	3%	1%	3%	7%











"It is important to monitor their usage of smartphone/tablet as the new era of technology is very advanced now and [I] do not wish for them to misuse the opportunity given. Even so, it is one way for them to be exposed to new rapid technology."

Stay-at-home mother of 2 boys, aged between 3 and 5 years, Philippines

"I normally download only educational apps for my kid to help with his learning and increase his creativity..."

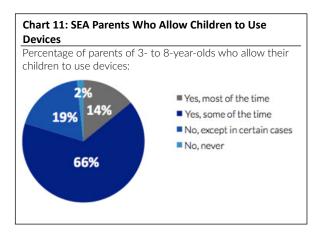
Stay-at-home mother of 1 boy, aged between 6 and 8 years, Thailand

"Smartphone/tablet should have more educational apps and games..." Working mother of 1 boy & 1 girl, aged between 3 and 8 years, Indonesia



SECTION 3: CHILDREN'S DEVICE USAGE AND OWNERSHIP

Almost all the parents (98%) who participated in this study allow their children to use devices. However, the varying degree as to which parents allow children to use devices is noticeable, inferring that parents like to exert control when it comes to device usage by their children. Well over half (66%) allow usage some of the time, 19% only allow usage in certain cases and a low 14% allow usage most of the time.



Ownership of devices. Given that the children in this study are between the ages of 3 and 8 years, the majority (67%) of children use their parents' devices. Eighteen percent use a shared device for the family and 14% of the children use their own devices.

Across the sample, the behavior of parents related to allowing their children to use devices is insofar as parents like to exercise certain levels of control. However, parents in the Philippines (83%) and Indonesia (83%) allow their children more device usage in comparison to their neighbouring countries. Sixteen percent of parents in the Philippines and 14% in Indonesia allow their children to use devices most of the time, while 67% and 69%, respectively, allow them some of the time.

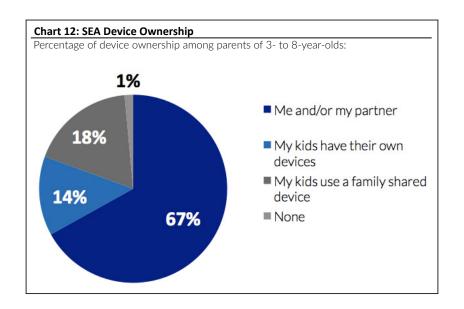
The Philippines has the highest percentage (40%) of devices used that are shared or child-owned, with the closest comparable country being Malaysia (31%).

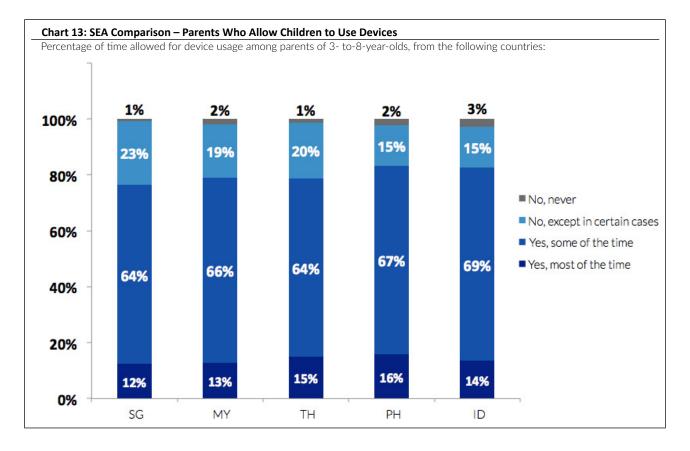
Brands of devices used by children. Samsung and Apple are the most popular brands of devices used by children in this study. Forty percent of children use an iPad, 36% a Samsung smartphone, 25% a Samsung tablet, and 25% use an iPhone. The remaining users' devices are varied, with 18% using non-Apple or Samsung brands, and only 6% using toy tablets.

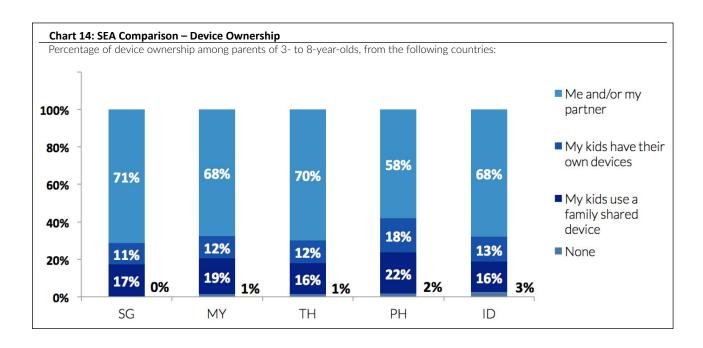
The types of devices used differ by country. Samsung devices are the most popular among children in Malaysia (25% to 44%), Indonesia (28% to 30%) and the Philippines (23% to 30%).

The use of non-Apple or Samsung brands is more significant in Indonesia (31% vs 57%) and the Philippines (28% vs 38%). In Indonesia, children use BlackBerry Smartphones (18%) more than Apple iPhones (11%); however, the Samsung Smartphone (30%) is the dominant brand of device. Apple iPads and Samsung tablets are used the most in Singapore (58% vs 26%, respectively) and the least in Indonesia (16% vs 28%, respectively).

The usage of Apple/Samsung tablets (the average of the percentage of users of Apple/Samsung tablets) is more than the usage of Apple/Samsung smartphones (the average of the percentage of users of Apple/Samsung smartphones) in Singapore (42% vs 41%), Malaysia (34% vs 32%), Thailand (both 32%), Philippines (29% vs 22%) and Indonesia (22% vs 20%).







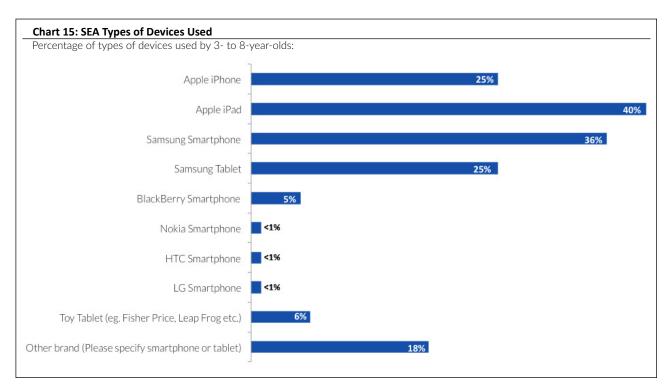


Chart 16: SEA Comparison – Types of Devices Used Percentage of types of devices used by 3- to 8-year-olds, from the following countries:									
Devices	SG	MY	TH	PH	ID				
Apple iPhone	42%	19%	30%	14%	11%				
Apple iPad	58%	44%	40%	34%	16%				
Samsung Smartphone	40%	44%	34%	30%	30%				
Samsung Tablet	26%	25%	24%	23%	28%				
Blackberry Smartphone	3%	2%	0%	2%	18%				
Nokia Smartphone	1%	5%	4%	3%	4%				
HTC Smartphone	2%	3%	1%	3%	1%				
LG Smartphone	4%	0%	1%	3%	1%				
Toy Tablet (e.g., Fisher Price, Leap Frog etc.)	4%	3%	7%	8%	6%				
Other brand (Please specify smartphone or tablet)	10%	14%	11%	28%	31%				



"In my opinion, every child should own a smartphone/tablet and must also be trained to use it smartly. This will make them more IT savvy and more smart [aside from] learning and [developing] through traditional ways."

Stay-at-home mother of 1 boy, aged btween 3 and 5 years, Malaysia

"Smartphones are beneficial for kids if parents take the time to monitor their usage. Personally, I only have educational games or apps such as singing apps, alphabet apps, ABC, etc. So I don't have to worry if my kid wants to borrow my smartphone once in a while."

Working mother of 1 girl, aged 3 to 5 years, Thailand

"In my opinion, not too expensive but strong and durable. Also, [a toy] smartphone is preferred for kids, as sometimes they still cannot control their [actions] or [emotions] and just throw the smartphone or simply press any button with full power."

Working mother of 1 boy, aged 3 to 5 years, Indonesia



SECTION 4: DEVICE FREQUENCY AND LOCATION OF USAGE

Participants of this study appear to actively control the frequency of their children's device use through the week as reflected in the data. At least 27% of parents allow their children to use devices sometimes during the weekends, 25% sometimes during the weekdays, 19% have their children using devices at home daily during weekdays, 18% daily during weekends, 11% not often and 1% never. (Some of these percentages can be slightly higher as these are calculated as percentage of responses and not percentage of parents surveyed. Some parents selected more than one of the six options for each location).

Device usage time. Most children 3 to 8 years use devices for 1 hour or more in each sitting (41%). However, differences can be noted across the ages and genders of the children.

Usage time by boys. Boys in the 6- to 8-year-old segment use devices longer than those in the 3- to 5-year-old segment. Fifty-one percent of parents of boys claim their 6- to 8-year-olds use devices for more than an hour, whereas only 33% parents claim the same of their 3- to 5-year-olds.

Usage time by girls. Girls in the 6- to 8-year-old segment use smartphones and tablets longer than those in the 3- to 5-year-old segment. Forty-nine percent of parents claim that their 6- to 8-year-old girls use devices for more than an hour, while 30% of parents of 3- to 5-year-old girls claim the same.

Device usage frequency at home. Almost the entire sample - 99% of parents - allows their children to use devices at home. Children use devices most frequently at home in comparison to other places (e.g. in school, while travelling). Children's frequency of device usage at home is

the highest in the Philippines (93%), followed by Malaysia (91%), Singapore (89%), Thailand (86%) and Indonesia (83%).

Children from the Philippines use devices at home mostly (49%) during weekdays and those from Thailand use them at home, on weekends (50%). Device usage at home occurs least frequently during weekdays in Thailand (37%), while it occurs least frequently during weekends in Indonesia (39%).

Device usage frequency in school. Only 17% of children use devices in school. Eighty-three percent of children have never used devices in school.

Most children in Indonesia (91%), Malaysia (85%), Singapore (83%), Thailand (83%) and the Philippines (76%) never use devices in school.

Needless to say, device usage in school is extremely low across the entire sample, with the majority being the Philippines (15%), followed by Malaysia (9%), Thailand (8%), Singapore (7%) and Indonesia (4%). Device usage in school in the Philippines is spread across weekdays (8%) and weekends (7%), whereas in Thailand it occurs mostly during the weekdays (7%).

Device usage frequency in restaurants. Children do not use devices frequently in restaurants across all SEA countries. Children's device usage in restaurants sometimes occurs over the weekend (28%) or not often (28%). Thirty percent of parents claim there is no device usage by their children in restaurants at all.

Singapore (55%) leads with children's usage

of devices in restaurants followed by Malaysia (51%), the Philippines (39%), Indonesia (34%) and Thailand (25%). Weekend usage of devices in restaurants occurs most frequently in Singapore (44%) with Malaysia (35%) a close second. Malaysia (16%) leads in weekday device usage in restaurants followed closely by Singapore (11%).

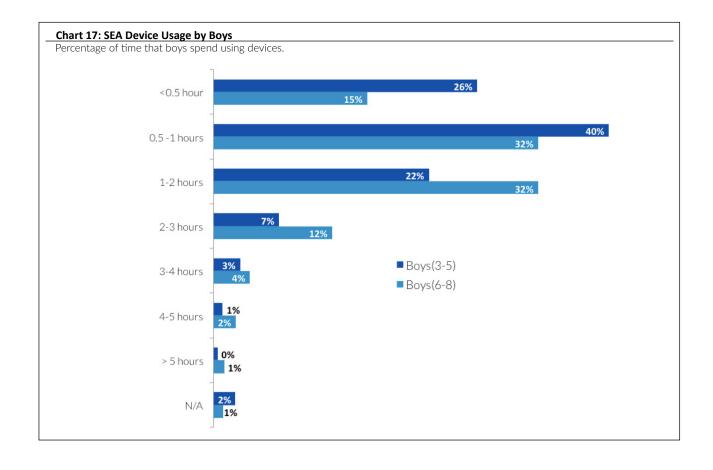
Device usage frequency at friend's house. Sixty percent of children do not use devices at their friends' houses, while 34% do over the weekend sometimes or infrequently. Across all countries, device usage at friends' houses is quite infrequent, with the highest frequency occurring in the Philippines (29%), followed by Malaysia (17%), Singapore (15%), Indonesia (13%) and Thailand (9%).

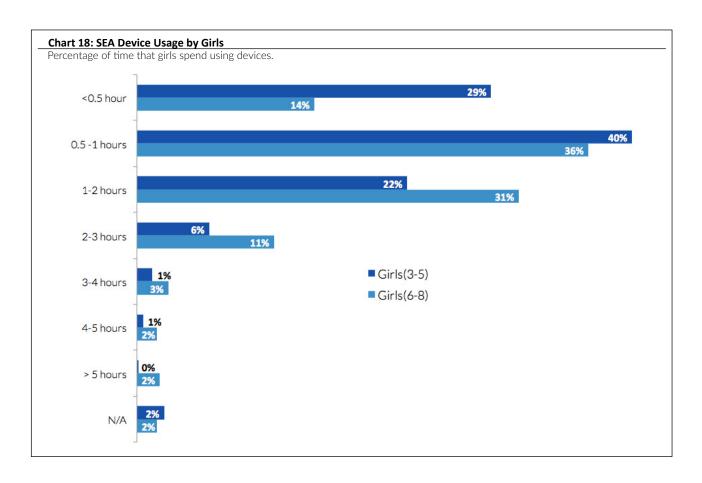
Weekends are more popular than weekdays for using devices at a friend's house, since weekends are when children visit their friends. The Philippines leads in both weekday (23%) and weekend (6%) usage. Thailand shows the lowest frequency of device usage at a friend's place, with 91% not using

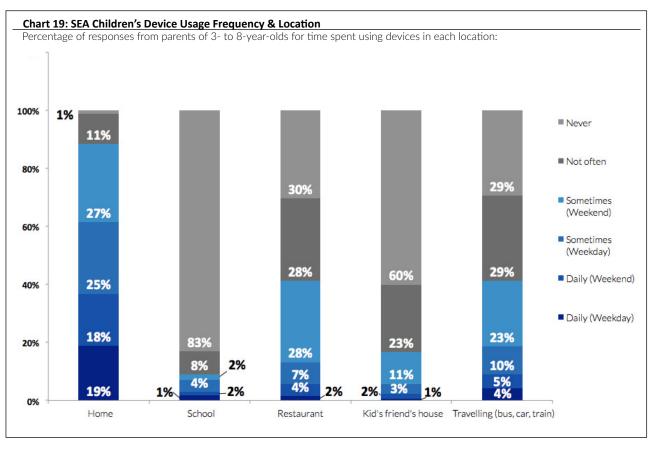
devices often or at all.

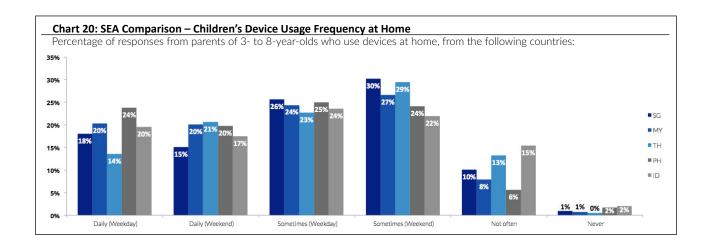
Device usage frequency while travelling by car, bus or train. While a significant portion of parents (71%) overall allow their children to use devices while travelling, the breakdown of this statistic indicates that frequency is strictly controlled by parents. Thirty-three percent of parents say they only sometimes permit device usage by children while travelling, while 29% say they hardly ever do so. Twenty-nine percent never allow it during travel.

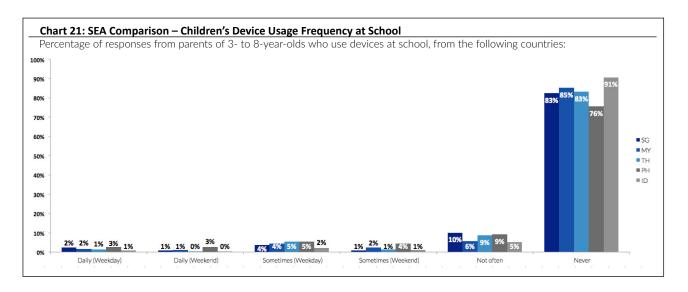
Children's usage of devices while travelling by car, bus or train is minimal. It occurs most frequently in Malaysia (54%), followed by Singapore (49%), the Philippines (38%), Indonesia (35%) and Thailand (29%). In Thailand, where device usage while travelling occurs least frequently, 71% of parents state their children do not use devices often or at all while travelling. Weekday (22%) and weekend (33%) device usage while travelling occurs most in Malaysia.

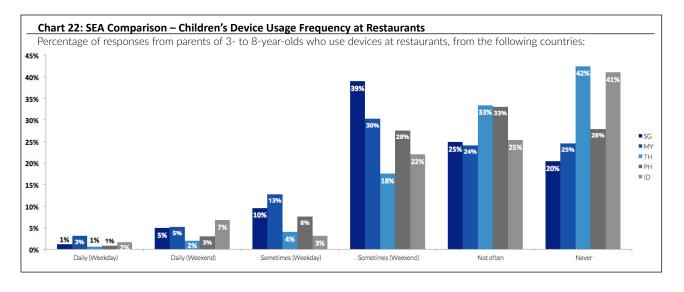


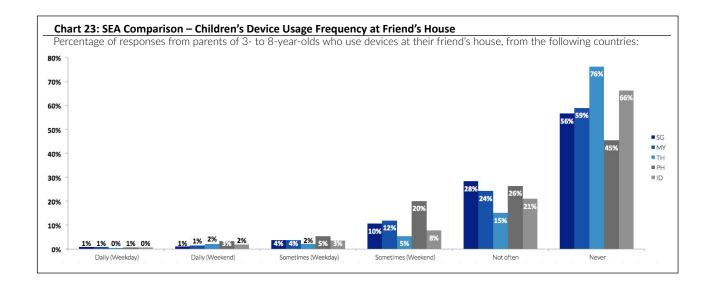


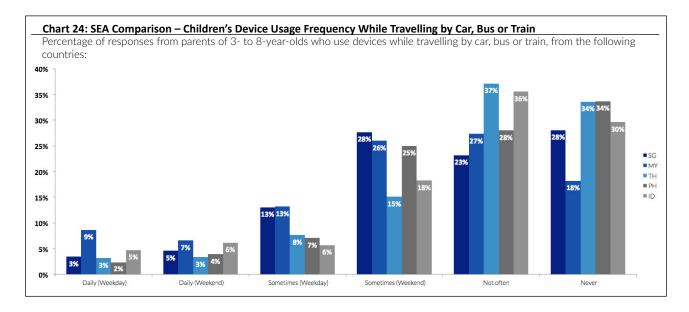














"It is a great tool for kids to have instant reference in related to academic. Handy entertainment when travelling long distance journey." Working mother of 1 girl, aged 6 to 8 years, Malaysia

"I feel it's important to understand what app are the kids on even at [a friend's] house..."

Working father of 1 boy, aged 6 to 8 years, Singapore

"I usually monitor what apps are installed on my kids' tablets, I am the one who downloads. If they want to watch videos over YouTube, I am the one searching for the videos they want to watch, to avoid seeing unnecessary videos. I limit my kids' tablet use to a maximum of 2 hours every weekend."

Stay-at-home mother of 2 boys, aged 6 to 8 years, Philippines



SECTION 5: PARENT-CHILD INTERACTION

The time of day that parents spend with their children correlates with whether they are working or stay-at-home parents. Since almost two-thirds of parents (65%) consider themselves to be "working", 46% of the time spent by parents with their children is between the hours of 6PM and 9PM after they get home from work, followed by 20% spent early in the morning between the hours of 6AM and 9AM.

Stay-at-home mothers spend a substantial amount of time with their children after school between the hours of 3PM and 6PM (26%), as well as in the evening between the hours of 6PM and 9PM (31%).

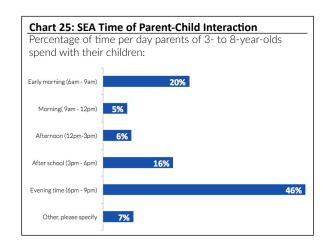
In contrast, working mothers do not spend as much time with their children during the hours of 3PM to 6PM (9%). However, working mothers compensate for the inability to spend time with their children in the evenings by interacting with them considerably more in the mornings. The data collected from this study indicates that more working mothers, in comparison with stayat-home mothers, spend time with their children between 6AM and 9AM (24% vs 13%).

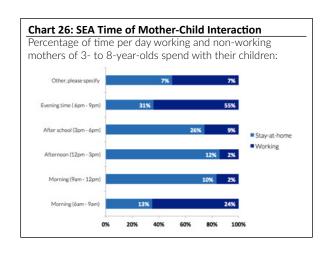
Since parents who participated in this study have children aged 3 to 8 years, it can be inferred that their children are in school between the hours of 9AM and 12PM. Across SEA, parent-child interaction occurs least during this time period (5%).

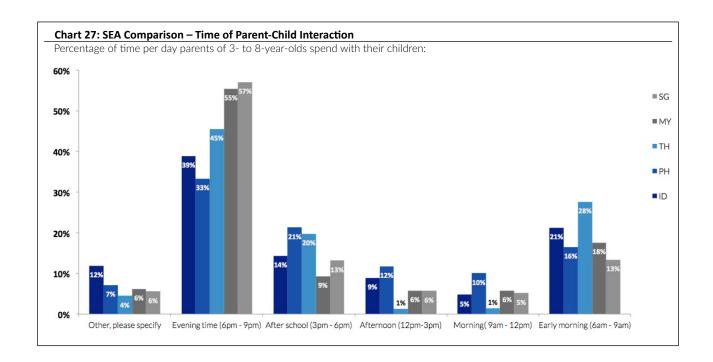
Only 2% of working mothers interact with their children between 9AM and 12PM, in comparison with 10% of interaction between stay-at-home mothers and their children.

Among all the countries in this study, Singapore leads in the 6PM to 9PM parent-child interaction evening slot, with 57% of parent-children engagement during this time. Over one-fifth of parent-child interaction from the Philippines (21%) and Thailand (20%) occurs during the afterschool hours of 3PM to 6PM.

Alternatively, parents in Thailand spend the most amount of time with their children early in the morning before school starts, with 28% of interaction among them between the hours of 6AM and 9AM. Indonesia follows with 21% of parent-child interaction between the hours of 6AM and 9AM.









"I believe that moderation is key. Just because I let my kids use tablets, [it] does not necessarily mean that I'm not a responsible parent. This is my choice and as long as I see that my kids are okay and doing well at school, the use of mobile devices is all good for us."

Working mother of 1 boy & 2 girls, aged 6 to 8 years, Philippines

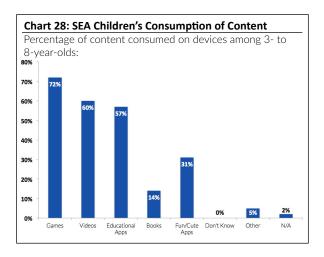
"Parents should supervise their children while using [a] smartphone. Usage time should be limited. Children need to learn and play with others. Smartphones are not a good solution for making children quiet. Time and other limitations should be set by parents."

Working mother of 2 boys, aged 3 to 8 years, Indonesia



SECTION 6: CHILDREN'S CONSUMPTION OF CONTENT

Children across SEA use devices for a variety of different reasons. Parents of 3- to 8-year-olds say their children use devices mainly for games (72%), videos (60%) and educational apps (57%), followed by fun/cute apps (31%) and books (14%). The high consumption of videos and games tends to explain the concerns that parents have for their children, such as exposure to inappropriate content, impact on health, damage to devices, addiction and high phone bills.



Notably, consumption patterns differ by gender and more so by age when examining the <u>3- to</u> <u>5-year-old</u> and <u>6- to 8-year-old</u> age segments.

Games, videos and educational apps are the most popular content types among 3- to 5-year-olds, with popularity depending on the country where they are used. As children enter the 6- to 8-year-old age segment, they start playing more games in relation to using educational apps and watching videos.

The other four concerns (discussed earlier) are at similar levels for parents of both age segments. Usage shifts from one entertainment content type (videos) to the other (games) or remains the

same. However, the use of education apps drops significantly, juxtaposing with most parents' primary motivation for allowing their children to use devices in the first place (to supplement education).

The various motivations (early exposure to technology, as a supplement to school education, entertainment and keeping child busy/quiet) for allowing children to use devices are much stronger for parents of 6- to 8-year-olds than parents of 3- to 5-year-olds (by 3% to 13%). This leads to higher device usage in the older age segment, but more for entertainment than education, much against the desire of parents.

Content consumed by children aged 3 to 5 years.

When comparing 3- to 5-year-old boys with girls, the behaviour is quite similar with regard to consumption of videos (60% vs 61%) and educational apps (60% vs 64%). However, there is a difference in the usage of games (65% vs 58%) and fun/cute apps (25% vs 34%).

Video is the most popular type of content consumed by both boys (71%) and girls (72%) in Singapore. The same is true for both boys (69%) and girls (72%) in Thailand. In the Philippines, educational apps are used more by both boys (80%) and girls (74%), whereas in Indonesia, games are most popular among both boys (57%) and girls (56%). In Malaysia, behaviour contrasts with the trend in other countries by differingbetween the genders: boys mostly play games (70%), while girls use educational apps (63%).

Content consumed by children aged 6 to 8 years.

As children grow older, their interest in what devices can offer them changes and, more often

than not, diverts from parental expectation of what they should be using a device for. For example, among 6- to 8-year-old boys, gaming increases by 24% to become 65% while educational app usage drops by 12% to become 48%. In this age segment, the gap in the usage of games between boys and girls widens, with 15% more consumption by boys (89%) than girls (74%).

There is a slight gap in the usage of fun/cute apps when comparing girls of the different age segments, with 4% more 6- to 8-year-olds (48%) consuming this type of content on devices. Boys of the different age segments consume the same amount of fun/cute apps at 25%.

There is also a gap in the consumption of educational apps for 6- to 8-year-olds in comparison with 3- to 5-year-olds, with boys consuming 12% more at 48% and girls consuming 7% more at 57%.

Video consumption remains similar for both boys and girls (59% vs 61%), but for 6- to 8-yearold boys, it drops by 2% compared with 3- to 5-year-olds. The drop in video consumption is compensated by increased gaming.

Consumption behaviour for 6- to 8-year-olds differs by country. With increase in age, the tendency for children in Singapore is to choose gaming over videos. In Malaysia, girls begin to play more games (77%) and boys play even more (88%) as they grow older.

Similarly, in the Philippines, boys move from educational apps (56%) to games (90%). Girls continue to use educational apps (71%) although it drops by 3% in comparison with the consumption of educational apps by girls aged 3 to 5 years (74%).

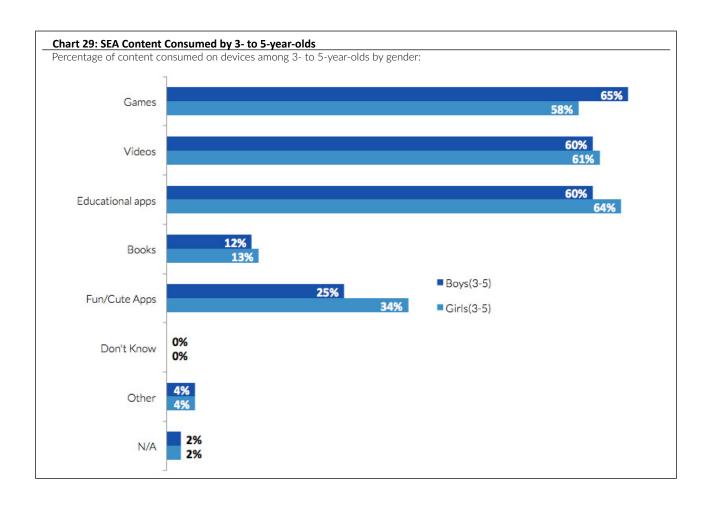


Chart 30: SEA Comparison – Content Consumed by 3- to 5-year-olds Percentage of content consumed on devices among 3- to 5-year-olds, from the following countries:												
Aged 3-5	SEA		SG		MY		TH		PH		ID	
Content Type	Boys	Girls										
Games	65%	58%	60%	59%	70%	59%	59%	52%	69%	52%	67%	56%
Videos	60%	61%	71%	72%	52%	59%	69%	72%	51%	49%	43%	41%
Educational Apps	60%	64%	63%	70%	51%	63%	50%	44%	80%	74%	46%	52%
Books	12%	13%	14%	17%	14%	18%	8%	6%	17%	13%	7%	7%
Fun/Cute Apps	25%	34%	15%	32%	30%	37%	25%	43%	28%	29%	26%	30%
Don't Know	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%
Other	4%	4%	5%	5%	2%	4%	3%	5%	2%	3%	3%	3%
N/A	2%	2%	1%	1%	2%	1%	2%	0%	2%	5%	2%	2%

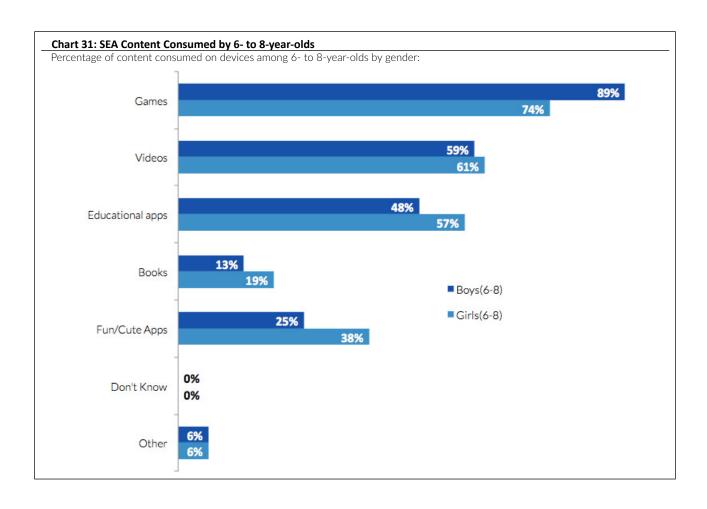


Chart 32: SEA Comparison – Content Consumed by Children Aged 6- to 8-years-old													
Percentage of conten	Percentage of content consumed on devices among 6- to 8-year-olds, from the following countries:												
Aged 6-8	SEA		SG		MY		TH		PH		ID		
Content Type	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Games	89%	74%	91%	76%	88%	77%	81%	73%	90%	66%	66%	49%	
Videos	59%	61%	66%	69%	46%	53%	76%	68%	54%	60%	35%	31%	
Educational Apps	48%	57%	54%	50%	43%	61%	41%	51%	56%	71%	27%	33%	
Books	13%	19%	15%	17%	9%	21%	18%	18%	17%	23%	4%	9%	
Fun/Cute Apps	25%	38%	20%	22%	21%	48%	30%	40%	33%	49%	19%	23%	
Don't Know	0%	0%	1%	0%	0%	1%	0%	1%	0%	0%	1%	0%	
Other	6%	6%	6%	7%	8%	7%	6%	4%	4%	6%	4%	2%	
N/A	1%	2%	0%	1%	3%	1%	0%	3%	2%	3%	1%	2%	



"My son learned ABC's and counting at [the] age of two because of iPad apps. Tablet usage has its ups and downs but it would still depend on how a parent disciplines his/her child."

Working mother of 1 boy, aged 3 to 5 years, Philippines

"I usually allow my son to learn English vocabulary from YouTube and apps." He also plays matching and math games. They have instructions in English so that's good. He gets to listen from [a] native speaker."

Working mother of 1 boy, aged 3 to 5 years, Thailand

"Smartphone is good at educational apps for kids but sometimes it become[s] a reason why the kids are lazy and they just want to play or watch videos."

Stay-at-home mother of 2 girls, aged 3 to 5 years, Philippines



SECTION 7:

TYPE OF CONTENT PARENTS WANT CHILDREN TO CONSUME

Parents have a strong opinion on the type of content they would like their children to consume via devices, but this is in opposition to what children actually consume.

Parents consider books, educational apps and local language apps very important.

A sizeable percentage of parents are neutral about their children's use of contemporary interactive entertainment choices, such as entertainment apps (26%), branded apps (26%) and videos (23%).

Overall, parents in the Philippines lead in giving importance to all content types and parents in Indonesia rank the lowest for all of them.

Book apps. Eighty-five percent of parents consider book apps to be "somewhat important" to "very important", making book apps the most important type of content parents want their children to consume.

This is in line with the primary purpose of most parents allowing their children access to devices as an education supplement. Parents in the Philippines rank the highest (94%) and Indonesia the lowest (78%) when it comes to the importance of children using devices to read books. Parents in Malaysia and Thailand also rank the importance of book apps highly, at 85%, followed closely by Singapore (83%).

The difference in importance of book apps between stay-at-home mothers (88%) and working mothers (84%) is 4%.

There is a 3% difference between parents of 6- to 8-year-olds (82%) and those of 3- to 5-year olds (79%).

Only 2% more of parents of children who use their own/shared family devices (87%) give importance to book apps compared with parents who use parent-owned devices (85%).

Educational apps. Eighty-one percent of parents consider educational apps to be "somewhat important" to "very important", which correlates with their motivation to allow children to use devices to supplement school education.

While most parents rank education as one of their strongest motivations for allowing device use by their children, there is one country that stands out in this respect. The Philippines ranks the highest (93%) once more when it comes to device use by children for educational purposes, and Indonesia again the lowest (76%) for educational apps. Eighty-three percent of parents in Malaysia rate educational apps as important followed by and Thailand (82%) and Singapore (78%).

Parents of the 3- to 5-year-old and 6- to 8-yearold age segments, give educational apps similar importance: 80% and 78%, respectively. Eighty-six percent of parents of children who use their own/ shared family devices also consider educational apps important, while 81% of parents of children who use a parent-owned device agree.

A slightly higher percentage (85%) of stay-at-home mothers consider educational apps important, compared to 81% with working mothers.

Local language apps. Over two-thirds of the study sample (69%) consider local language apps to be "somewhat important" to "very important".

Parents of 6- to 8-year-olds (68%) give much more importance to language apps than parents of 3to 5-year-olds (59%). Significantly, more stay-athome mothers (75%) give importance to language apps than working mothers (68%).

Similarly, parents whose children use their own/ shared family devices (73%) give more importance to language apps than those who do not allow their children to have dedicated devices (68%).

Parents in Thailand (80%) and the Philippines (79%) rank the highest and parents in Indonesia the lowest (57%) on the usage of language apps on devices by 3- to 8-year-olds. Parents in Singapore and Malaysia follow at 67% and 60%, respectively.

<u>Videos.</u> Videos are not too far behind in importance for parents, at 62%. Videos are a popular form of content for children to view on their devices, as indicated by the data from this study.

Parents in the Philippines (76%) and Thailand (76%) rank the highest, while parents in Indonesia the lowest (44%) when it comes to the importance of videos for both education and entertainment. Only 58% of parents in Singapore and 49% in Malaysia rate videos as an important content type.

Stay-at-home mothers (66%) give more importance to having videos on devices used by their children than working mothers (61%) do. Parents of 3- to 5-year-olds (55%) and parents of 6- to 8-year-olds (56%) consider videos almost equally important.

The parents of children who use their own/shared family devices (66%) give more importance to videos than those who use parent-owned devices (61%).

Branded Apps. Fifty percent of parents also believe that branded apps are "somewhat important" to "very important".

Following the trend with the content types discussed so far, the Philippines ranks the highest (72%) and Indonesia (30%) the lowest on branded apps. Sixty-two percent of parents in Thailand, followed by Singapore (44%) and Malaysia (43%), rate branded apps as important. Stay-athome mothers (54%) give branded apps more importance than working mothers (48%) do.

Parents of 6- to 8-year-olds (54%) also give more importance to branded apps than parents of 3to 5-year-olds (48%). Parents whose children use their own/shared family devices (55%) allow more branded apps than those whose children use parent-owned devices (50%).

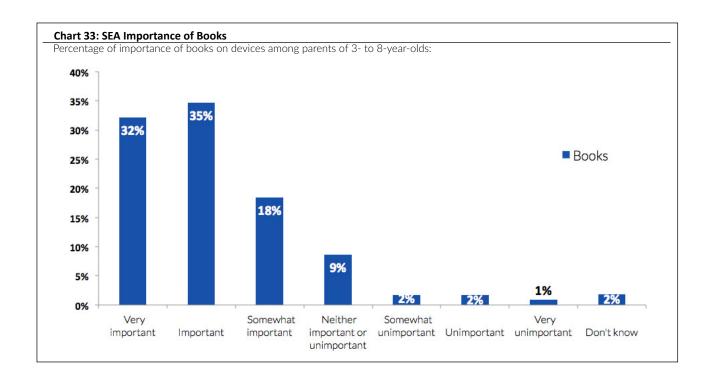
Entertainment Apps. Only 29% of parents think entertainment apps are "somewhat important" to "very important".

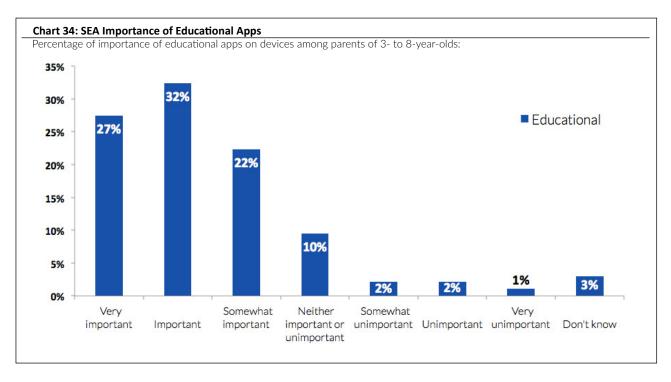
There are 6% more parents of 6- to 8-year-olds (30%) compared to parents of 3- to 5-year-olds (24%) who think that giving their children access to entertainment apps is important.

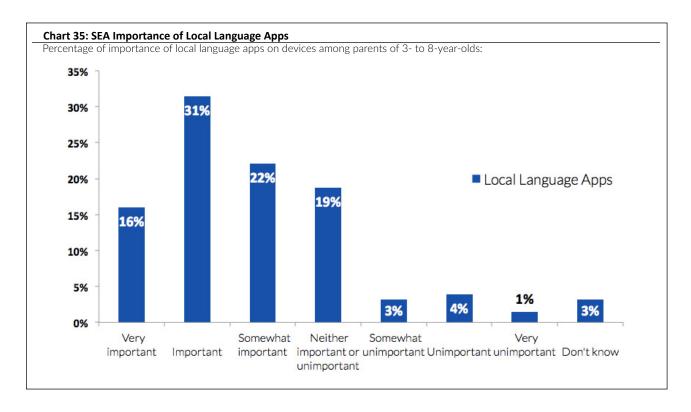
The Philippines ranks the highest (35%) and Indonesia the lowest (26%) for the importance parents place on permitting their children to use entertainment apps on their devices. Parents in Singapore rank the importance of entertainment apps at 28%, followed by both Malaysia and Thailand at 27%.

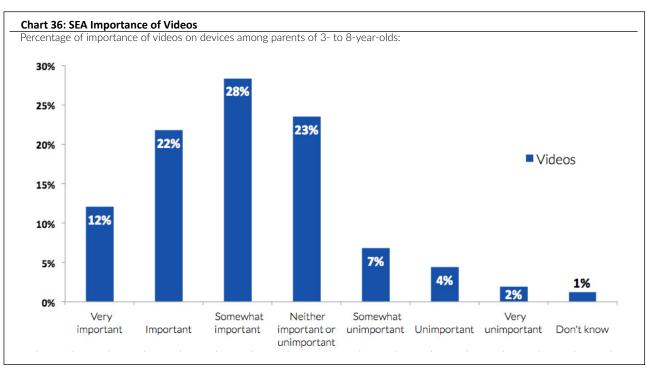
Across SEA, working mothers (29%) give slightly more importance to entertainment than stay-athome mothers (27%) do.

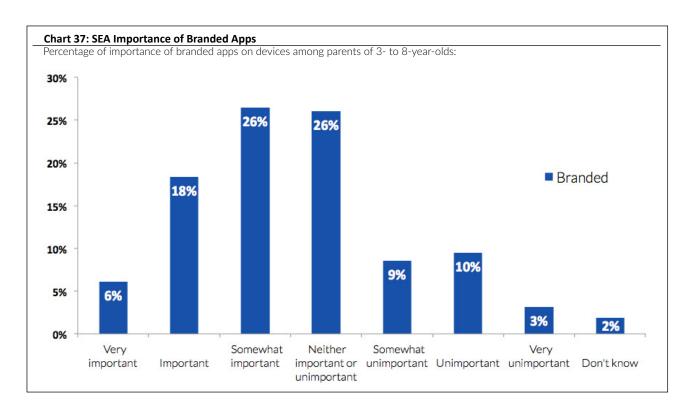
Moreover, there are 2% more parents of children who use their own/shared family devices than those children who use parent-owned devices who also find entertainment apps beneficial (30% vs 28%).

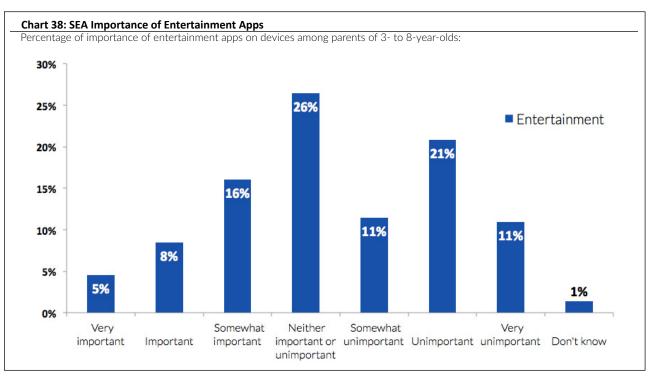


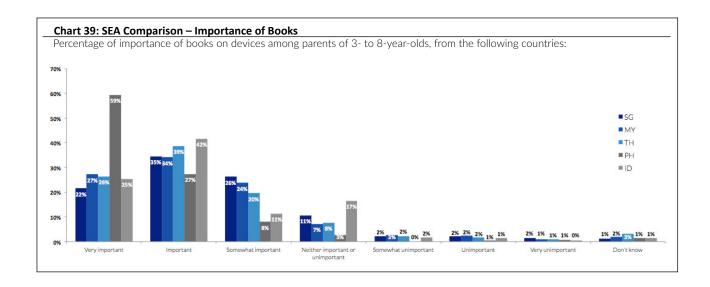


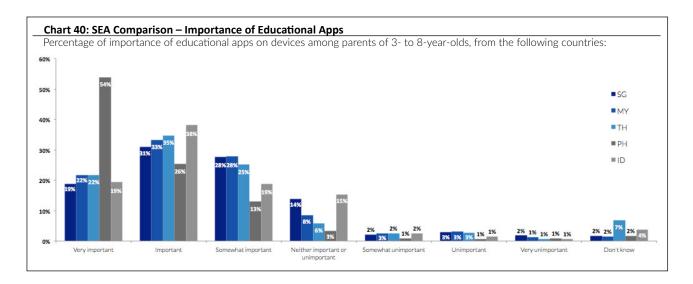


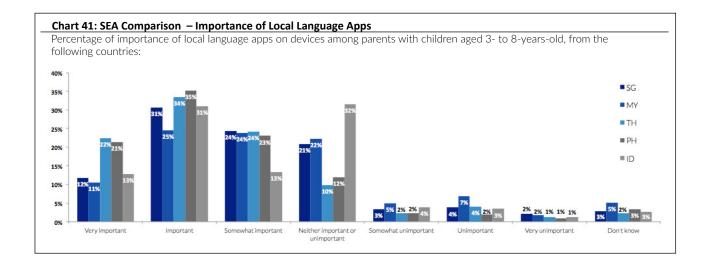


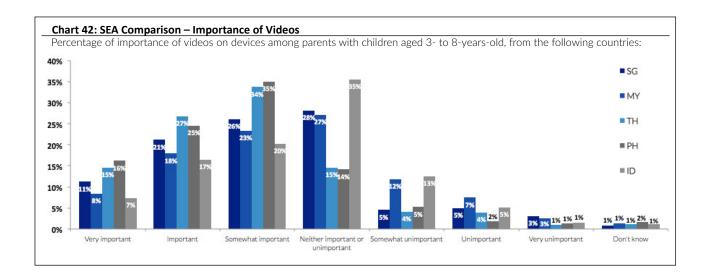


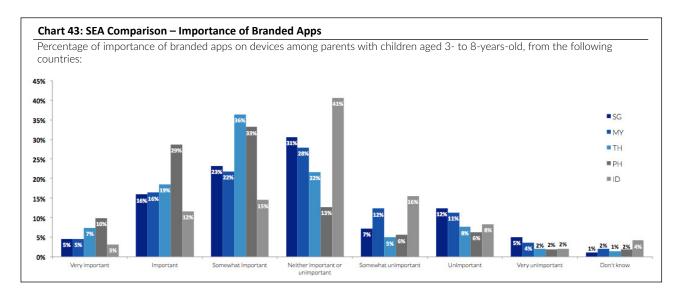


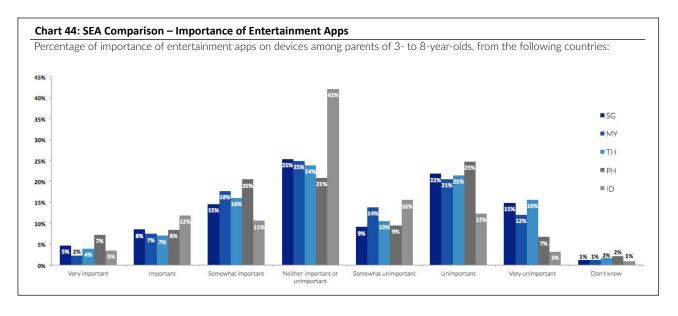














"I wish there were more apps in our native language. We wish to have our children learn Filipino first before they learn English but because most apps are in English, they learn English more."

Working mother of more than 4 girls, aged 6 to 8 years, Philippines

"I want smartphones to have more Thai apps, focusing more on fun and educational games, so the kids would learn while having fun. But I would prefer free apps."

Working mother of 1 boy, aged 3 to 5 years, Thailand

"Educational apps can be good, however, it is still important to limit their usage as much as possible."

Working mother of 1 boy, aged 3 to 5 years, Singapore



SECTION 8: PARENTAL CONCERNS ASSOCIATED WITH CHILDREN'S **USAGE OF DEVICES**

While the majority of parents in this study permit device use among their children, they still have a host of concerns over the technology-related issues their children face, both online and offline:

- At 92%, the majority of parents are concerned about the impact of device usage on their children's health;
- 90% of parents are concerned about their children facing the risk of addiction to devices;
- 88% of parents are concerned about their children's exposure to inappropriate content (highlighting the parents' need for control over content censorship in relation to children's device use):
- 67% percent about high phone bills; and
- 60% about damage to devices.

Health and development. Even though parents permit device use by their children, the majority (92%) are still concerned about the effect that device usage may have on their children's health and development.

When broken down further, data shows that parents of both age segments, 3- to 5-year-olds and 6- to 8-year-olds, are concerned about the effect of device use on children's health equally (93%). These health concerns are shared by the majority of stay-at-home mothers (91%) and working mothers (94%), though slightly more for the latter.

Such concerns regarding the impact of device usage on children's health and development are also equally shared by parents of children who use their own/shared family devices (88%) and parents whose children use parent-owned devices (89%).

Parents in Thailand are the most concerned (99%) about the impact of device-use on their children's health and parents in the Philippines are the least concerned (82%). Parents from other countries show a high level of concern as well: 95% of parents in Singapore, 94% in Indonesia and 90% in Malaysia.

Among the common health concerns that parents are the risk of vision impairment and the lack of physical activity due to excessive device use.

Addiction to devices. The risk of child addiction to devices is a concern shared by parents globally, and this concern is apparent in the study sample. As the second biggest concern of SEA parents (90%), it also correlates with their concern over the health impact of device use on children.

Parents in Singapore are the most concerned (95%) about their children's addiction to devices, followed by parents in Thailand (94%), Indonesia (91%), Malaysia (88%) and the Philippines (77%).

With more time to personally monitor their children, stay-at-home mothers are slightly less concerned about device addiction (87%) than working mothers (92%) are. Parents of both age, 3- to 5-year-olds and 6- to 8-year-olds, segments have a similar level of concern: 92% vs 90%, respectively.

Parents whose children use their own/shared family devices (87%) are less concerned about addiction than parents of children who use parentowned devices (90%).

Exposure to inappropriate content. Eighty-eight perecent of parents who participated in this study are concerned about their children's exposure to inappropriate content through the Internet while using devices.

What constitutes as inappropriate content for parents is mostly related to YouTube videos and other websites with content more suitable for adults, as well as mobile advertisements increasing awareness of adult content.

The majority of parents in Indonesia (95%) show high levels of concern about this matter and parents in the Philippines (75%) are the least concerned. Ninety-three percent of parents in Singapore and Thailand, in comparison to 86% in Malaysia, rate this concern "somewhat to very important".

Working (90%) and stay-at-home (86%) mothers both feel strongly about their children facing the risk of exposure to inappropriate content through device use. It is slightly more of an issue for working mothers, who are not able to personally monitor their children's usage of devices while they are away from home.

The majority of parents of children who use their own/shared family devices (88%) show almost equal concern about their children being exposed to inappropriate content while on their devices with parents of children who use parent-owned devices (89%).

Concern for 3- to 5-year-olds vs 6- to 8-yearolds. As discussed in Sections 4 and 6, the older age segment uses devices for longer periods per sitting and more for gaming and videos, (as opposed to the younger ages segment who uses devices for educational purposes in addition to entertainment).

Due to the shift in behaviour as children get older, there is an increase in parental concerns related to what their children are consuming and exposed to online. This is reflected in the data, with parents of 3- to 5-year-olds expressing lesser concern (89%) over device content than parents of 6- to 8-yearolds (92%) do.

High phone bill. Sixty-seven percent of parents have expressed concern over apprehension of high phone bills due to children's device use.

It is interesting to note that as children get older, the greater the concern is among parents over high phone bills: 63% of parents of 3- to 5-yearolds vs 75% of parents of 6- to 8-year-olds. We can extrapolate that this increase in concern is related to the fact that the older segment tends to use devices for gaming, which often attracts in-app purchase opportunities (as discussed in Section 6).

Working and stay-at-home mothers are equally (68%) worried about high phone bills. Notably, there is a significant increase in the concern levels of mothers regarding this issue as children get older.

Parents who allow their children to use their own/ shared family devices and those whose children use parent-owned devices, worry almost equally about this matter (67% and 68%, respectively).

High phone bills are the biggest concern for parents in Thailand (94%), followed by parents in Indonesia (91%), Malaysia (88%), the Philippines (77%) and Singapore (72%).

Damage to devices. In comparison with the high percentage of parental concern related to exposure to inappropriate content and the impact of excessive device usage on children's health, only 60% of parents are concerned about damage to devices due to children's usage.

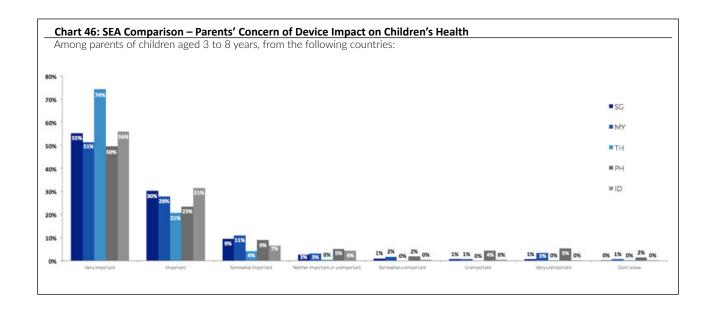
However, parental opinion on "damage to devices" does differ across the SEA countries, with parents in the Philippines (71%) the most concerned, and parents in Indonesia (46%) the least concerned. Parents from the other countries rate damage to devices from "somewhat to very important" as follows: Malaysia (65%), Thailand (59%) and Singapore (57%).

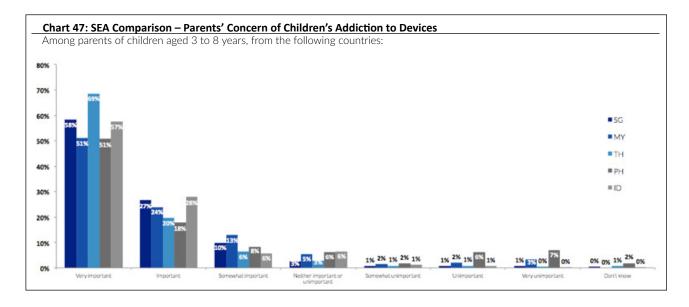
When comparing stay-at-home mothers with working mothers, the former (64%) are more concerned about damage to devices caused by their children's usage than working mothers (58%) are.

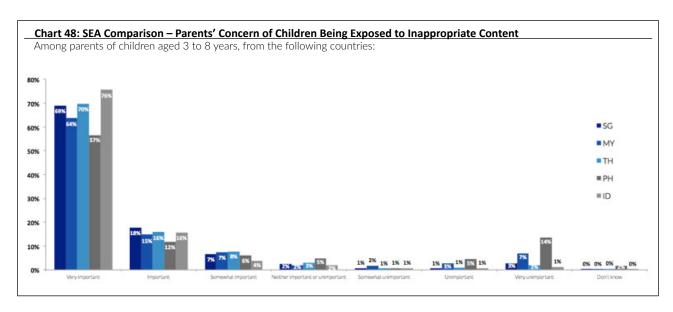
The age of children does not have an impact on parents' concerns surrounding damage to devices. Parents of 3- to 5-year-olds show about the same level of concern about damage to their devices as parents of 6- to 8-year-olds (55% vs 54%, respectively).

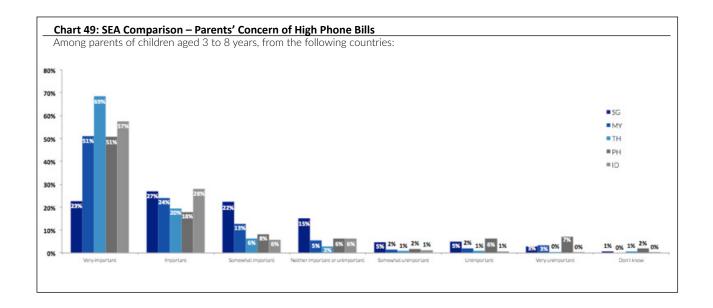
Meanwhile, parents of children who use their own/ shared family devices are slightly less concerned about damage to devices than parents of children who use parent-owned devices (59% vs 61%).

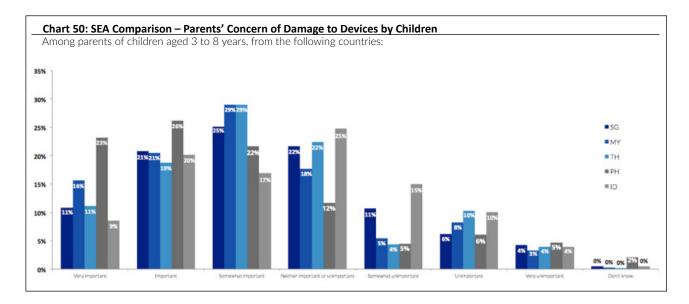
Chart 45: SEA Parents' Concerns for Allowing Usage of Devices by Children Percentage by importance of concerns of parents for allowing their children aged 3 to 8 years to use devices:							
Importance	Exposure to inappropriate content	Impact on health	Damage to devices	Addiction	High phone bill		
Very important	67%	57%	14%	58%	24%		
Important	15%	27%	21%	23%	23%		
Somewhat important	6%	8%	25%	9%	20%		
Neither important or unimportant	3%	3%	20%	4%	16%		
Somewhat unimportant	1%	1%	8%	1%	5%		
Unimportant	2%	1%	8%	2%	7%		
Very unimportant	5%	2%	4%	2%	4%		
Don't know	1%	1%	1%	1%	1%		













"[Devices should contain] more educational apps and games. Protection from inappropriate content is very important."

Working mother of 1 boy & 1 girl, aged 3 to 8 years, Indonesia

"Exposing kids to [smartphones/tablets] too early is bad for their brain development..."

Stay-at-home mother of 1 boy, aged 3 to 5 years, Singapore

"Make sure to always guide your kids everytime they want to use/play [with the tablet]. Always [have] a limited time when they use it [because] too much use of it may cause addiction."

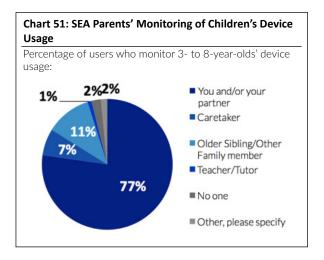
Stay-at-home mother of 1 boy, aged 3 to 5 years, Philippines

SECTION 9:

PARENTAL MONITORING AND CONTROL OF DEVICE USAGE

Monitoring of devices. A high level of parental monitoring occurs when children use devices. Seventy-seven percent of the monitoring of children's device usage is done by parents themselves, while 11% is done by other family members and 7% by caretakers.

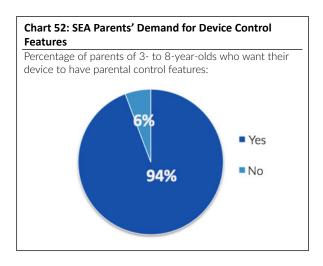
Monitoring habits by parents are similar across the countries. However, the country where parents monitor children's device usage the most is Thailand (89%), followed by Philippines (76%), Malaysia (75%), Indonesia (75%) and Singapore (74%).



Monitoring by family (parents, siblings, other family members) occurs most frequently in Thailand (95%) and least frequently in Singapore (83%). The Philippines (92%) has the second highest level of family monitoring, followed by Malaysia (89%) and Indonesia (87%).

Malaysia has a small but the highest percentage (5%) of parents of children who are not monitored at all when using devices, followed by Singapore (4%), Indonesia (3%), Thailand (1%) and the Philippines (0%).

Control by parents. Data reveals an overwhelming desire among parents to have control over their children's device usage, including the content their children have access to. The majority of participants (94%) want their smartphones/tablets to be equipped with parental control features, enabling them to exercise control even if they are not physically supervising their children's device usage.



Parental control features are most in demand in Thailand (97%), followed by Indonesia (96%), Malaysia (94%), Singapore (93%) and the Philippines (93%).

Requested parental control features for device use. The most requested features are setting usage time limits (72%), in-app purchase blocking (67%) and monitoring of child's usage or progress (66%).

Other desired parental features include the option to limit children's device usage by type of content or specific apps (53%), a subscription to a library of children's apps (36%) and the ability to switch to different profiles for each child using the device (31%). Parents would also like notifications to be sent to their own phones on their child's activities, a history of apps usage and the ability to enable/disable the child's device remotely.

Requested parental control features according to age segment. Parents of the two age segments, 3to 5-year-olds and 6- to 8-year-olds, show only a slight difference in their desire for parental control features (96% vs 98%, respectively). However, they do show some differences in opinion with regard to the identified parental control features.

In correlation with the increase in consumption of entertainment content and reduction in educational content by 6- to 8-year-olds, parents of the older children segment have a stronger need for monitoring features compared with parents of the younger children segment (98% vs 96%). Since entertainment content, especially games, offer in-app purchases and usage time increases with children's age, parents of the older children segment also show stronger interest in preventing in-app purchases (78% vs 74%) and setting time limits (80% vs 78%).

Sixty-one percent of parents of 3- to 5-year-olds want to limit usage of the number of apps that children have access to, versus 57% of parents of 6to 8-year-olds. Parents of the younger age segment also show more interest in a subscription service of curated children's apps (42% vs 33%) than do parents of the older segment.

Requested parental control features according to ownership of device. There is only a slight difference in the level of desire for parental control features between parents of children who use their own/shared family devices and parents of children who use parent-owned devices (96% vs 94%). The ownership of devices (own/shared family devices vs parent-owned devices) also does not have much impact on the level of desire for each of the features requested by parents.

Requested parental control features according to

willingness to purchase apps. There is marginal difference between parents willing to pay for apps and those who are not (95% vs 94%, respectively). However, the former are more inclined than the latter by 2% to 5% to pay for features except for prevention of in-app purchase, for which they show equal levels of desire.

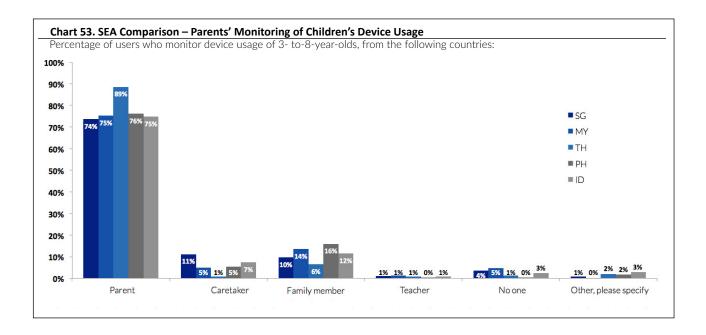
Requested parental control features according to working mothers vs stay-at-home mothers.

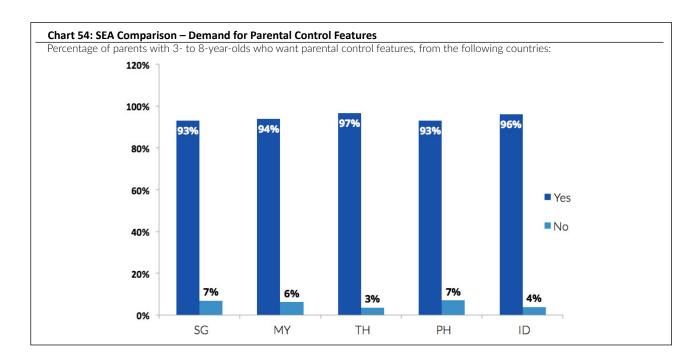
Working mothers and stay-at-home mothers share almost equal levels of desire for parental control features (94% vs 95%). However, working mothers show more interest in preventing in-app purchases by their children compared with stay-at-home mothers (70% vs 62%). Working mothers are also more interested in limiting number of apps (54% vs 51%), setting time limits for use (74% vs 70%) and a subscription service for a library of children's apps (38% vs 32%). Both working and stay-athome mothers express slightly similar interest in monitoring children's usage or progress (67% vs 65%) and in having different profiles for each child (32% vs 30%).

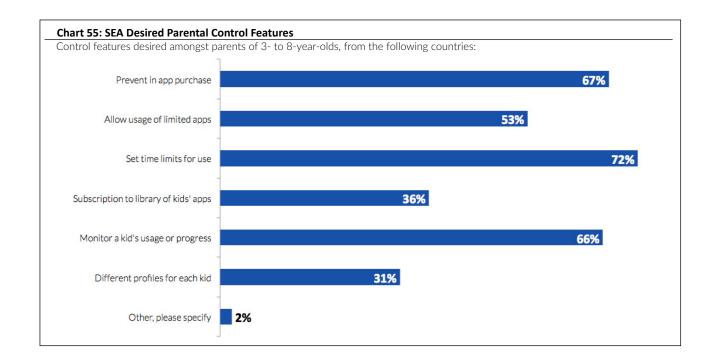
Ranking of requested parental control features according to country:

- Prevention of in-app purchase: Thailand (80%), ranks it the highest, while Indonesia (49%) the lowest. Among all the features, this is the most requested feature in Thailand.
- Usage of limited apps: Indonesia (60%) ranks it the highest, while Thailand (44%) the lowest.
- •Time limits for use: Singapore (80%) ranks it the highest, while Thailand (65%) the lowest. Among all the features, it is the most requested feature in Singapore, Malaysia (74%) and the Philippines (71%).
- Subscription to library of children's apps: Thailand (45%) ranks it the highest, while Indonesia (29%) the lowest.

- Monitor child's usage/progress: Indonesia (74%) ranks it the highest, while Thailand (56%) the lowest. It is the most requested feature in Indonesia overall.
- Different device profiles for each child: Singapore (42%) ranks it the highest, while Thailand (11%) the lowest.









"It's better to set a limitation so kids can [only open] certain apps [at a] certain time. The apps should be fun and educative."

Working mother of 1 girl, aged 3 to 5 years, Indonesia

"The content is more focused on their age. For example, YouTube, if they have the kid's menu, it only allows the kid's YouTube instead of open YouTube."

Working father of 2 boys & 4 girls, aged 3 to 8 years, Malaysia

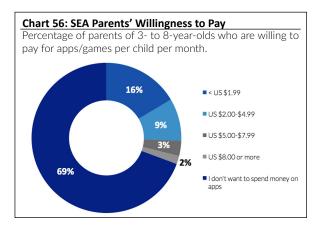
"Be able to set alert mode when kids start watching or clicking on inappropriate links or websites to alert us. eg. sexual related or violent/brutal clips."

Stay-at-home mother of 1 boy, aged 3 to 5 years, Singapore



SECTION 10: PARENT'S WILLINGNESS TO PAY

Parents were asked how much they are willing to pay for apps, per child, per month. A large number of parents are unwilling to purchase apps for their children. Sixty-nine percent of parents do not want to spend any money on apps for their children. The most common reasons for not wanting to pay for apps include the availability of acceptable free apps, the preference to spend money on physical activities or books, children's short-term interest in a specific app and potential device addiction.



Only 16% are willing to pay US\$1.99 or less for apps. Nine percent are willing to pay between US\$2.00 and US\$4.99 and 5% are willing to pay more than US\$5.00 on apps.

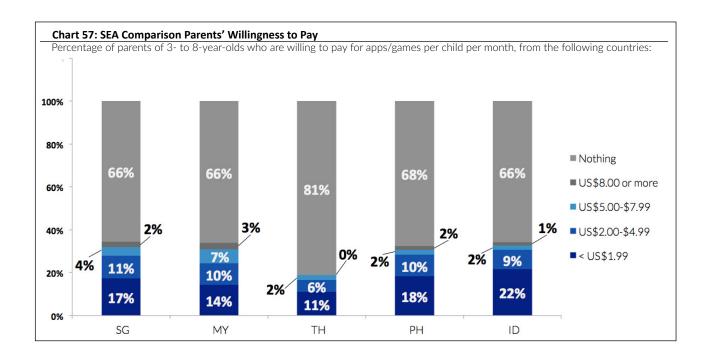
Thirty-one percent of parents of 3- to 5-year-olds and 32% of parents of 6- to 8-year-olds are willing to pay for apps.

Three percent more parents of 6- to 8-year-olds (21%) are willing to pay US\$1.99 or less for apps, in comparison with parents of 3- to 5-year-olds (18%). Only 3% of parents of 3- to 5-year-olds are willing to pay more than US\$8.00 for apps, whereas parents of 6- to 8-year-olds are not willing to pay more than US\$8.00 for apps at all (0%).

Twenty-nine percent of both stay-at-home mothers and working mothers are willing to pay for apps for their children. However, the willingness to pay differs slightly by price range. 2% more working mothers would pay less than US\$1.99, whereas 3% more stay-at-home mothers are willing to pay between US\$2.00 and US\$4.99.

Across the countries, most parents are unwilling to spend money on apps. However, the countries where parents are willing to pay the most are Singapore, Malaysia and Indonesia, all at 34%, closely followed by the Philippines at 32%.

The country where parents are the least willing to pay for apps is Thailand. Parents in most countries would pay less than US\$1.99. The country where most parents are willing to pay US\$2.00 or more is Malaysia (20%), closely followed by Singapore (17%), the Philippines (14%), Indonesia (12%) and Thailand (8%).





"I usually download free applications because the kids get bored easily. They would play a certain app for a while and then play something else new, so I don't want to pay for it."

Stay-at-home mother of 1 boy, aged 3 to 5 years, Thailand

"There are many free applications available and most of them are also good." Working mother of 1 boy, aged 6 to 8 years, Indonesia

"We still can get good apps like books or educational apps with no extra cost (in other words, free). Plus, we have downloaded an app which notifies us about paid apps becoming free for a specific period of time."

Stay-at-home mother of 1 girl, aged 6 to 8 years, Philippines



CONCLUSION

By covering a representative sample of over 2,700 parents of children aged 3 to 8 years, this study presents quantitative evidence on behavioural trends in the SEA region pertaining to children's device usage. It is one of the pioneering research projects in the region to explore and elucidate on the subject.

The study first establishes that device usage, particularly smartphones and tablets among children, is the norm - a hypothesis validated by 98% of parents confirming that they allow their children to use such devices.

Several other behavioural trends are also disclosed through the supporting data, the most important of which are presented below:

Parents give their children access to devices predominantly to supplement their education.

There are four primary motivations for parents allowing their children to use devices: to supplement children's education, to give them early exposure to technology, to provide entertainment and to keep them quiet/busy. However it is clear that the main motivation of parents for permitting device use by children is driven by educational purposes.

Parents' attitudes towards their children's device usage are quite nuanced. For example, parents of children aged 6 to 8 years are more inclined to let their children use devices than parents of children aged 3 to 5 years, keeping with the supposition that they do so because they want to supplement their children's school education with technology. However, it is also parents of the older age segment who are more worried in general about the impact device use may have on their children. Also, as

revealed by the data, stay-at-home mothers give more importance to device usage than do working mothers.

Moreover, parents who allow their children to use their own/shared family devices are also more motivated to let their children use devices than do parents of children who use parent-owned devices.

Children use devices mainly for gaming, videos and educational apps. There is a noticeable discrepancy between the motivations behind parents permitting device use by their children and what children are actually using devices for. This disparity is particularly evident among 6- to 8-year-olds, who prefer to utilize devices mainly for gaming and entertainment. Children in the 3to 5-year-old age segment use devices primarily for gaming and education. However, among children in the 6- to 8-year-old age segment, there is a marked drop in the percentage of those who continue to use devices for education.

This change in focus may be attributed to the following observations:

- As children grow older, their school curriculum progressively changes from the play-based system they were introduced to in preschool to a more academic program. Given this, we can posit that 6to 8-year-olds spend less time on supplementing their education through devices and more time on games and entertainment as a respite from their academic studies.
- For 3- to 5-year-olds, play school means playtime and, therefore, they see little to no distinction between gaming and educational apps as the latter is age-appropriately designed using play-

based concepts. However, as children mature, they become more aware of and involved in popular social trends, including those that are technology based such as games and videos.

Parents are mostly concerned about health risks involved in device usage, addiction to devices and exposure to inappropriate content. Data shows that children use devices for 30 minutes to one hour per sitting – which is more than enough time for them to be exposed to their parents' top three concerns regarding their device usage: health risks, addiction to devices and inappropriate content. Health concerns are mostly related to the effect prolonged device-use can have on children's vision and physical activity.

Data also reveals that parents of children who use their own/shared family devices and parents of children who use parent-owned devices share similar levels of concern over the impact of device usage on health, device addiction and exposure to inappropriate content. Secondary concerns such as damage to devices and high phone bills get similar results as well.

Parents are the primary supervisors of their children's device usage. Given that children use devices most frequently at home and least frequently in school, it only makes sense that 77% of parents have appointed themselves the task of personally policing what their children do and view on their devices.

To assist them in this task, 94% of parents have expressed their desire for parental control mechanisms that will enable them to accomplish two courses of action:

1. Limit children's consumption of content by setting time limits, censoring the type of content or app made available to them and having a subscription to a library of children's apps; and

2. Monitor children's usage behaviour by giving parents the option to create different profiles for each child using the device, receive notifications on their child's activities, receive a history of apps usage, block in-app purchases and enable/disable the child's device remotely.

While very few parents are willing to pay for apps/ games on devices, 30% of parents are willing to pay for children's apps given they provide educational value and flexibility of parental control.

Bridging the gap: what parents want vs what children want. Technology can be a powerful tool for parents, but parents have yet to witness its full potential as such. With regard to devices such as smartphones and tablets, the study reveals that despite their concerns over their children's device usage, parents still view devices as an educational tool outside of school. However, here we find a discrepancy: parents want children to use devices as a means to supplement their education, but children, as they get older, prefer to use them more for gaming or entertainment and less for education.

Parents recognise this discrepancy, as proven by their expressed desire for parental control mechanisms built into the devices. Parents want children to continue their education outside of school in terms of exposure to modern technology. What they do not want is for children to suffer the negative effects of device usage. The challenge now, it seems, is to devise tools that can bridge the gap between the primary motivations of parents and the actual reasons for children to use them.

Another consideration would be parents' individual and unique concerns. Such a tool should therefore accommodate the flexibility to tailor-fit itself to the user's specific requirements.

Finally this tool should ideally aid parents in fostering a positive parent-child interaction filled

with fun, entertainment and meaningful learning moments.

APPENDIX - TOPLINE DATA REPORT

Q1. Are you a parent of at least one 3-8 year old child?

Yes, I am a working mother	1516
Yes, I am a stay-at-home mother	941
Yes, I am a working father	241
Yes, I am a stay-at-home father	16
No	609

Q2. How many kids do you have in the following categories?

	1	2	3	4	>4	None	
Boy, 3-5	1043	78	25	9	10	291	
Boy, 6-8	559	53	2	0	18	329	
Girl, 3-5	863	63	17	10	13	271	
Girl, 6-8	505	30	2	0	16	339	

Q3. On an average weekday, what time of the day do you spend the most time with your kid?

Early morning before school or work (6am – 9am)	856
During the morning (9am – 12pm)	239
During the afternoon (12pm – 3pm)	282
After school (3pm – 6pm)	695
Evening time (6pm – 9pm)	2007
Other, please specify	300

Q4. Do you let your 3-8 year old kids use a smartphone/tablet?

Yes, most of the time	375
Yes, some of the time	1739
No, except in certain cases	493
No, never	45

Q5. Who owns the smartphone/tablet that your kids use?

Me and/or my partner	1973
My kids have their own devices	402
My kids use a family shared device	530
None	43

Q6. Which type of smartphone/tablet do your kids use?

Apple iPhone	673
Apple iPad	1091
Samsung Smartphone	969
Samsung Tablet	681
BlackBerry Smartphone	128
Nokia Smartphone	82
HTC Smartphone	53
LG Smartphone	58
Toy Tablet (eg. Fisher Price, Leap Frog etc.)	158
Other brand, please specify smartphone or tablet	500

Q7. What do they use the smartphone/tablet mostly for?

	Games	Videos	Educational Apps	Books	Fun/Cute Apps	Don't Know	Other	N/A	
Boy, 3-5	761	698	699	141	294	3	41	23	
Boy, 6-8	560	373	306	82	160	2	35	7	
Girl, 3-5	559	591	619	121	329	3	39	17	
Girl, 6-8	411	340	317	107	211	2	34	9	

Q8. When and where do your kids use a smartphone/tablet the most?

	Daily (Weekday)	Daily (Weekend)	Sometimes (Weekday)	Sometimes (Weekend)	Not often	Never
Home	651	624	853	933	365	39
School	51	26	111	53	212	2233
Restaurant	43	119	210	791	803	859
Kid's friend's house	16	47	92	296	631	1629
When travelling by car,	123	137	274	650	846	844
bus or train						

Q9. Typically, how long do they use it for each time they start using it?

	<0.5 hour	0.5-1 hour	1-2 hours	2-3 hours	3-4 hours	4-5 hours	>5 hours	N/A
Boy, 3-5	306	459	250	76	31	10	5	25
Boy, 6-8	97	205	205	75	23	14	7	6
Girl, 3-5	274	383	209	56	12	5	1	21
Girl, 6-8	79	201	170	61	14	9	19	9

Q10. Who monitors your kids when they use smartphones/tablets?

You and/or your partner	2505
Caretaker	214
Older sibling/Other Family member	365
Teacher/Tutor	32
No one	76
Other, please specify	50

Q11. How would you rank the following types of content for your kids?

	Very	Important	Somewhat	Neither	Somewhat	Unimportant	t Very	Don't
	importan	ıt	important	important	unimportant		unimportant	know
			(or unimporta	ant			
Entertainment apps	121	224	425	700	303	553	289	37
(eg. Angry Birds)								
Educational apps	727	860	593	252	56	56	30	78
(eg. Umizoomi:								
Math Racer)								
Branded apps	161	488	701	690	226	252	84	50
(eg. Disney)								
Books	853	919	488	229	46	44	25	48
Videos	320	578	752	623	180	116	50	33
Local language apps	425	833	586	496	84	104	39	85

Q12. How much are you willing to pay for apps/games per child per month?

<usd \$1.99<="" th=""><th>437</th></usd>	437
USD \$2.00 - \$4.99	242
USD \$5.00 - \$7.99	87
USD \$8.00 or more	47
I don't want to spend money on apps	1839

Q13. Why don't you want to spend money on apps?

Free-text response.

Q14. How do you rate the following reasons to allow kids' usage of smartphones/tablets?

	Very	Important	Somewhat	Neither	Somewhat	Unimportant	Very	Don't
	importan	t	important	important	unimportant		unimportant	know
			Ol	or unimportant				
Early exposure to	289	695	824	417	147	172	86	13
technology								
Supplement to	491	863	750	304	94	100	31	10
school education								
Entertainment	105	514	898	672	186	173	88	7
To keep them quiet/	123	410	907	605	195	220	172	11
busy sometimes								

Q15. How do you rate the following concerns on kids'usage of smartphones/tablets?

	Very importar	Important	Somewhat important	Neither important or unimporta	unimportan	Unimportan it	t Very unimportant	Don't know
				r ummporta				
Exposure to Inappropriate content (violence, sex, etc)	1770	407	166	79	23	48	134	16
Impact on health (makes them physically lazy)	1507	722	211	79	27	33	49	15
Damage to devices	365	567	654	518	208	208	105	18
Addiction (e.g. games)	1521	616	227	118	31	53	59	18
High phone bill (eg. in app purchases, internet charges)	630	617	535	416	142	175	97	31

Q16. Do you wish smartphones/tablets had a "kids mode" allowing you control over your kid's smartphone/tablet usage?

Yes	2492
No	151

Q17. What features would you like the "kid's mode" to have?

Prevent in app purchase	1814
Allow usage of only a limited number of apps	1446
Set time limits for use	1961
Subscription service to a library of curated kids' apps	971
Have a way to monitor a kid's usage or progress	1804
Have different profiles for each kid	849
Others	61

Q18. Please feel free to add any comments or opinions that you have in regards to kids' smartphone/tablet usage.

Free-text response.

the Asian parent Insights Team

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