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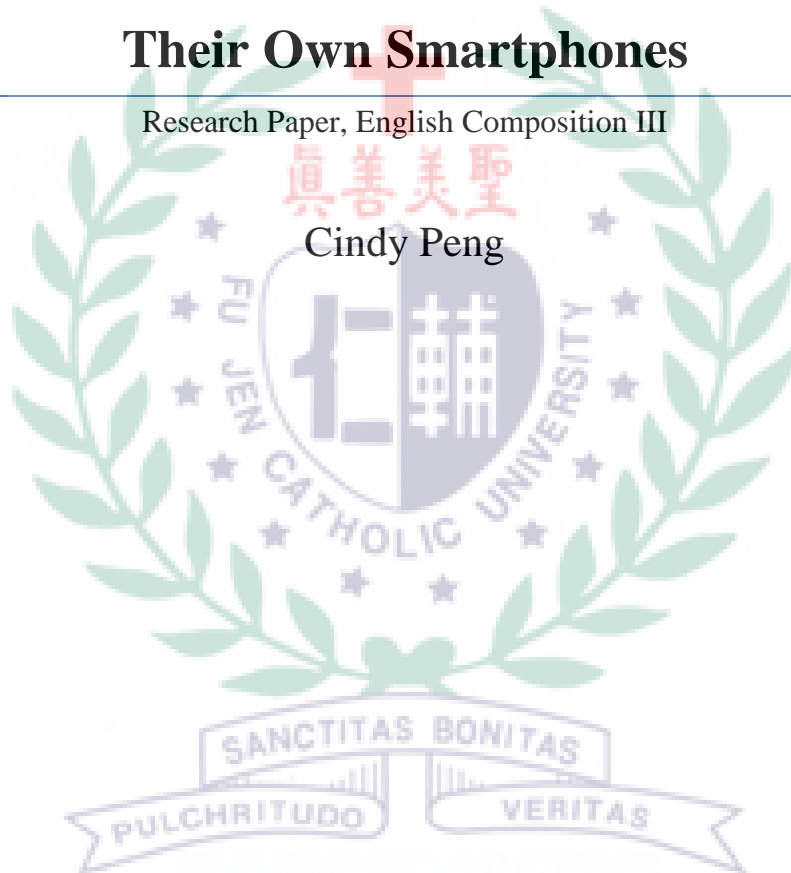
GRADUATION PROJECT 2016

Children under 12 Years Old Should Not Have Their Own Smartphones

Research Paper, English Composition III

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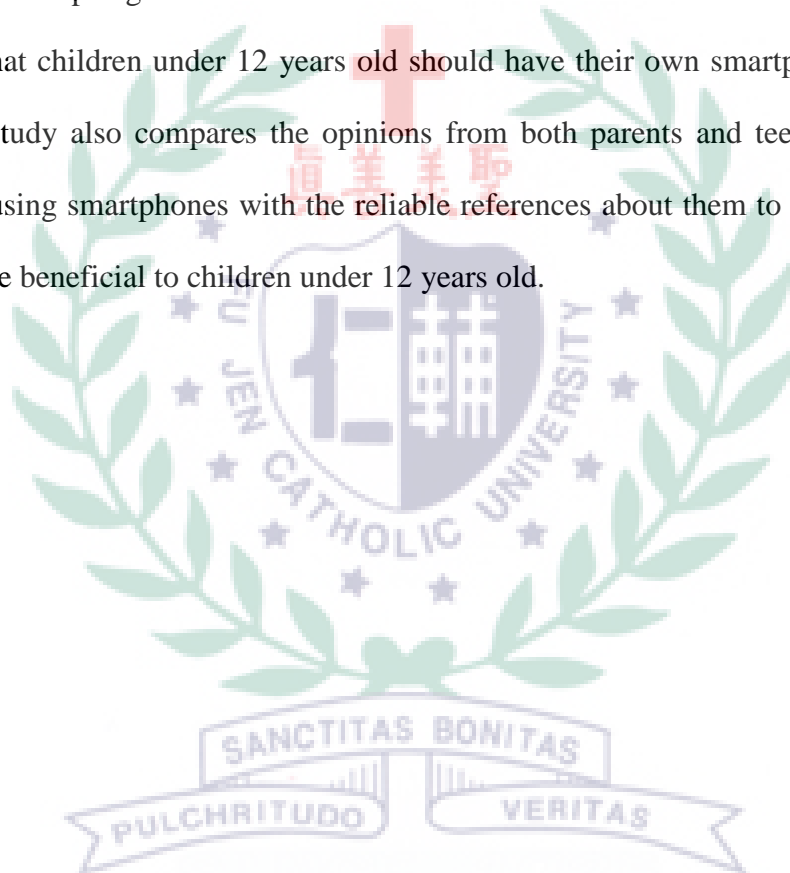
**Children under 12 Years Old Should Not Have Their
Own Smartphones**



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Composition and Conversation III (Section B)
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26 June 2015

Abstract

This paper aims to explore whether it is suitable and necessary for children under 12 years old to have their own smartphones, and how smartphones may influence children's health, their development in learning and their social interactions with others. This study anticipates collecting 90 questionnaires in total respectively from three groups of people: teenagers aging 13-18, undergraduates and postgraduates, and adults excluding undergraduates and postgraduates. It furthermore discusses whether these three groups of people agree that children under 12 years old should have their own smartphones or not. In addition, this study also compares the opinions from both parents and teenagers and their experience of using smartphones with the reliable references about them to find out whether smartphones are beneficial to children under 12 years old.



Outline: Children under 12 Years Old Should Not Have Their Own Smartphones

- I. Introduction: Even though smartphones bring convenience to humans' life, people should not overlook the negative effects which smartphones may have on them, especially on children under 12 years old who are still in the important period and stage in life of developing themselves both physically and mentally.
- II. Thesis: Children under 12 years old should not own their smartphones since having smartphones at such a young age may have a huge influence on children's health, their development in learning, and their social interactions with others.
- III. Research questions
 - A. What are parents', young adults' and teenagers' attitudes towards smartphones in terms of their influence on children's health, their development in learning and their social interactions with others?
 - B. How are parents, young adults and teenagers influenced by smartphones since they themselves had their own smartphones? (For example, their schoolwork, their interrelationship, their health, etc.) Are they more positively than negatively influenced by smartphones?
 - C. Do parents, young adults and teenagers agree that children under 12 years old should have their own smartphones? Why or why not?
- IV. Literature review
 - A. First of all, owning a smartphone at a young age may have a huge influence on children's health.
 - a. Children may have poorer eye sight due to their excessive use of smartphones.
 - Blue light
 - b. Smartphones may also cause physical pain or symptoms to adults as well as children.
 1. Text neck

2. Smartphone addiction

B. Second, owning a smartphone at a young age may have a huge influence on children's development in learning.

- Once children become addicted to using smartphones, they may furthermore be distracted by lots of information offered on the Internet and easily become less concentrated on their schoolwork.

C. Third, owning a smartphone at a young age may have a huge influence on children's social interactions with others.

- a. Smartphones can make children be less willing to interact with other people, especially those whom they are not familiar with.
- b. Also, children may easily look on using smartphones as a way of avoiding embarrassment in the public.

V. Methodology

A. Firsthand data collection

- a. Online questionnaire: Google form
- b. Three groups of respondents:
 1. Teenagers aging 13~18 (114 people)
 2. Undergraduates and postgraduates (55 people)
 3. Adults excluding undergraduates and postgraduates (163 people)
- c. 332 respondents in total

B. Compare the opinions of three groups of respondents by showing the percentages

VI. Results of the firsthand data along with discussion

VII. Conclusion: Even though issues or researches relating to smartphones has not been adequate and scientifically approved so far due to it appearing in recent years, yet people still cannot overlook the potential and possible influence which smartphones may have on children's health, their development in learning, and their social

interactions with others.

VIII. Works Cited

IX. Appendix

A. The content of the online questionnaire

B. Data collection and analysis



Children under 12 Years Old Should Not Have Their Own Smartphones

With the advancement of technology, smartphones have gradually replaced the old mobile phones and become an indispensable tool in people's daily life. Smartphones not only combine many useful features in a merely handful device but also allow people to surf the Internet at any time anywhere and furthermore make them connect themselves to the others around the world. Smartphones undoubtedly make people's life become more convenient and even more interesting. So far, more and more people have had at least one smartphone in their hands. According to Heggestuen, he points out in his article that "by the end of 2013, global smartphone penetration will have exploded from 5% of the global population in 2009, to 22%," which indicates "an increase of nearly 1.3 billion smartphones in four years". Heggestuen predicts the acute increase of the usage of smartphones worldwide and shows how popular smartphones will be in people's daily life. Without a doubt, smartphones are great invention in the human history. What's more, the age of people owning a smartphone has decreased, compared to the past. It is shown that in the United States, "78% of teens now have a cell phone, and almost half (47%) of those own smartphones" (Madden et al.). More and more adolescents start to have a mobile phone, or even a smartphone, at such a young age. It is not surprising that younger children or teenagers of the new generation are under the huge influence of smartphones because many of those children or adolescents have a smartphone in their hands; therefore, they are able to easily gain the access to the world of the Internet and be exposed to lots of information which is considered as not fully appropriate for their age.

Even though smartphones bring convenience to humans' life, people should not overlook the negative effects which smartphones may have on them, especially on children under 12 years old who are still in the important period and stage in life of developing themselves both physically and mentally. Children under 12 years old are not physically and mentally mature enough, so they are very likely to be negatively influenced by smartphones

due to the lack of judgement to deal with the abundant information on the Internet and the immaturity to restrict themselves from being addicted to smartphones. Children under 12 years old should not own their smartphones since having smartphones at such a young age may have a huge influence on children's health, their development in learning, and their social interactions with others.

This study aims to explore whether it is suitable and necessary for children under 12 years old to have their own smartphones and furthermore answer to the questions below:

1. What are parents', young adults' and teenagers' attitudes towards smartphones in terms of their influence on children's health, their development in learning and their social interactions with others?
2. How are parents, young adults and teenagers influenced by smartphones since they themselves had their own smartphones? (For example, their schoolwork, their interrelationship, their health, etc.) Are they more positively than negatively influenced by smartphones?
3. Do parents, young adults and teenagers agree that children under 12 years old should have their own smartphones? Why or why not?

First of all, owning a smartphone at a young age may have a huge influence on children's health. Children may have poorer eye sight due to their excessive use of smartphones, as what is pointed out that "excessive exposure of these [technological] devices in early age can cause poor eye sight for kids" (Sarwar and Soomro 221). In Loria's article, he mentions that the blue light of smartphones may cause people's health problems, and one of which is gaining poor eye sight. Blue light can "cause damage to the retina" if people directly look at the screens of their smartphones for a long period of time. In addition, he says that "the American Macular Degeneration Foundation warns that retinal damage caused by blue light may lead to macular degeneration," which is "a common, painless eye condition in which the central portion of the retina deteriorates and does not function adequately"

(“Macular Degeneration”). Macular degeneration is an eye disease which normally happens to the elderly; yet, it may also be possible now for those younger people to suffer from this disease once they overuse their smartphones without being aware of the potential damage of blue light of the smartphones in their hands. What’s more, it is stated that in a survey, “55% [of people] felt the amount of screen time they’re exposed to affects them with eye discomfort the main problem” (“Smartphone overuse”). After being excessively exposed to the use of smartphones, most people do feel their eyes uncomfortable on account of the direct and long gaze at the screens of their smartphones.

Apart from the poor eye sight, smartphones may also cause physical pain or symptoms to adults as well as children. Many people may feel their neck or back stiff, uncomfortable, or even painful, after they maintain the same posture for a long period of time, using their smartphones. The feeling of the pain in the neck is actually a symptom called “text neck.” According to Khaleeli, doctors explain this kind of symptom as “[increasing] the stress on the neck and [causing] excessive wear and tear that may eventually require an operation to correct it” when people adopt the posture while looking down on their smartphones. It is furthermore explained that “although our heads weigh between 10lb and 12lb, as we angle them down to look at our phones, the effective weight on our necks increases – at a 15-degree angle it is about 27lb rising to 60lb at 60 degrees,” according to Dr. Kenneth Hansraj (Khaleeli). The picture (see fig. 1) shows more clearly of Dr. Kenneth Hansraj’s statement. In

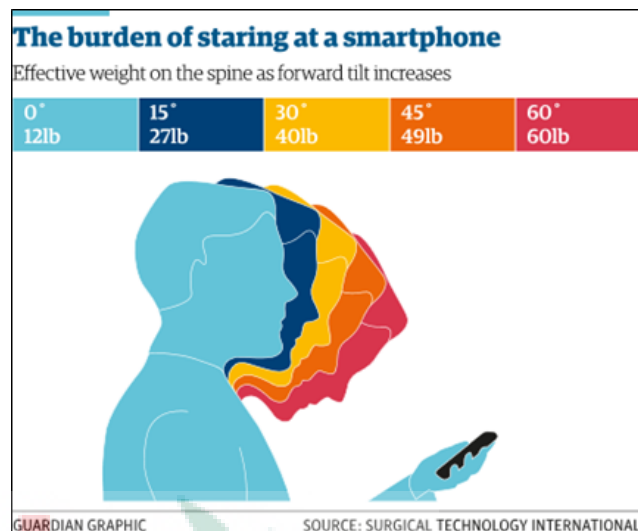


Fig. 1. The Burden of the Neck (Khaleeli, Homa. “Text neck: how smartphones are damaging our spines.” *The Guardian*. Guardian News and Media Limited or its affiliated companies, 24 Nov. 2014. Web. 18 May 2015.)

short, when people look down on their smartphones, their necks have to bear the weight of their heads, which furthermore increases the burden of the necks if people keep lowering their heads while staring at their smartphones. The lower people look down on their smartphones, the heavier their necks have to bear the burden of their heads, and this can bring about the symptom, “text neck.”

In addition to “text neck,” smartphones may lead to “smartphone addiction” as well. “Smartphone addiction” is a symptom “also known as communication addiction disorder” (Sarwar and Soomro 222). If people check or use their smartphones many times a day or feel panic or anxious when not being able to use or check their smartphones, they are likely to be considered as being over-addicted to smartphones. Nowadays, more and more people have been used to using their smartphones on their beds before they fall asleep. It is shown that “33% of mobile workers admitted that they check their phones for email and message throughout the night” (Sarwar and Soomro 223). Besides, according to Sarwar and Soomro, “the addiction to Smartphone[s] can be described as wanting to be in constant communication with people even though when there is no real need for communication.” People who are addicted to using smartphones may as well want to constantly keep in touch with others, even though there is no need to do so at all. What’s more, it is mentioned that “researchers have recognized habitual and compulsive communicating as a serious psychic problem.” Smartphone addiction has no longer been a technological phenomenon; it also becomes a mental problem to people. It is reported that “around 8.4% of Smartphone users in Korea are addicted to Smartphone” (Sarwar and Soomro 222). Moreover, in a study conducted by the University of Derby, most of the participants say “their smartphone use caused distraction from many aspects of their lives, including employment, hobbies and studies” (Siddique). Once people become excessively addicted to smartphones, they are not only affected by smartphones in terms of their health and mental condition but their social life with others as well.

Second, owning a smartphone at a young age may have a huge influence on children's development in learning. Once children become addicted to using smartphones, they may furthermore be distracted by lots of information offered on the Internet and easily become less concentrated on their schoolwork. According to Sarwar and Soomro, "the use of [Smartphones] exposes children to the habit of jumping from one option to another that trains them to gather small portions of information instead of concentrating and getting complete information," (221) and this habit "is harmful for development of brain" (221). If children have their own smartphones at such an early age and are exposed to lots of information, they will get used to merely receiving an abundant amount of information instead of learning to think independently and knowing how to judge whether the information is suitable for them or not. This furthermore can influence their later development in brain functions since they do not make their brain work and think often. In a research conducted by Boston University School of Medicine, it is also found that although smartphones can benefit toddlers' early literary skill or better academic engagement in students with autism, the "use of interactive screen time below three years of age could also impair a child's development of the skills needed for [math] and science" (Walters). Smartphones may possibly have an impact on children's early development for their academic skills in mathematics and science.

Third, owning a smartphone at a young age may have a huge influence on children's social interactions with others. Smartphones can make children be less willing to interact with other people, especially those whom they are not familiar with. They "disconnect kids from the true essence of social interaction" (Sarwar and Soomro 221). If children became addicted to using or playing with smartphones, they were more likely to pay most of their attention on their smartphones rather than on the people around them. One of the studies made by the University of Essex finds that "people who engaged in personal discussions when a cell phone was nearby—even if neither was actually using it—reported lower relationship quality and less trust for their partner" (Kerner). Aside from this, "[the participants of the study] also

felt their partner was less empathetic to their concerns” (Kerner). When people go out with their friends or family, they lower the quality of their relationship with others as well as being thought of as impolite when they take out their smartphones, or even use them while people are with their family or friends. This action can furthermore decrease the trust among people and their friends or family since the ones using smartphones make the others feel that they are not interested in being with them or seemly do not care about the problems or worries which their family or friends have. In short, even though the participants of the study mentioned above are adults, the same situation may happen to children and therefore have influence on their social interactions with others, too. If children become addicted to smartphones at such a young age, they are more likely to not only be less willing to interact with other people but also become less polite when they use their smartphones in the public or with their friends or the elder people.

Also, children may easily look on using smartphones as a way of avoiding embarrassment in the public. Many people use their smartphones in the public or when they are with people whom they are not familiar with, and this is a conduct of avoiding embarrassment in the public. Using smartphones seem to be considered as a way for people to refuse to interact with others or to avoid the interaction which they are not interested in. Even adults do this when they are in the public, not to mention children under 12 years old. If they have their own smartphones at an early age, they may naturally look on using smartphones as a way of avoiding embarrassment in the public instead of an impolite act. According to McCoy, children younger than 30 months “cannot learn from television and videos as they do from real-life interactions.” Children cannot learn their social interaction skills from technological devices such as television, videos, smartphones, tablets, etc. What matters more is the actual face-to-face interaction with other people. It is said that preschool age children “are constantly discovering new abilities and interests with regard to their relationships with peers and adults” (Brown et al. 114). Preschool age children are in the age

of discovering the world as well as themselves, and they also learn a lot through interacting with their peers and adults. This shows the importance of actual interactions with people. After all, children have to learn that they are living in the “real world” rather than the fictitious Internet world.

This study collects firsthand data by delivering online questionnaire which is made with Google form and consequently receives 332 responses to the questionnaire from the respondents. The questionnaire is divided into four parts. The first part is the basic information of the respondents. The respondents are asked to give the information of their gender, age and profession. Then, the respondents are divided into three groups of respondents in terms of their answers to the questions asked in the first part of the questionnaire. These three groups of respondents are respectively teenagers aging 13~18, undergraduates and postgraduates, and adults excluding undergraduates and postgraduates. The second part of the questionnaire is the usage of smartphones. The respondents are asked to fill out their habits of using smartphones. Also, those who have children as parents are asked to fill out the condition of their children who have their own smartphones as well. The third part of the questionnaire is about personal opinions towards some statements referring to the usage or influence of smartphones. The last part of the questionnaire is about the respondents' opinions towards children owning smartphones. Since the total number of the respondents of each group is not equally the same, the results of the questionnaire are shown as percentages to make it more objective.

The results and the analysis of the data collection can be found in Appendix B, and they will be elaborated along with discussion. According to Question 1 in Part II of the questionnaire, it is found that 97.4% of teenagers, 100% of undergraduates and postgraduates and 98.2% of adults excluding undergraduates and postgraduates had their own smartphones. This shows that smartphones are now widely used in people's daily life, no matter by which age groups of people. In Question 2 in Part II, 90.1% of teenagers and 69.1% of

undergraduates and postgraduates had their own smartphones at the age from 13 to 18, while mainly 35.6% of adults excluding undergraduates and postgraduates had their own smartphones at the age from 41~50 years old. This may be resulted from smartphones coming out and becoming popular among people in recent years, which are within 5 years or so; therefore, this makes younger groups of people have their own smartphones at a younger age, and older people have their own ones at an older age. In Question 3 in Part II, undergraduates and postgraduates, and adults excluding undergraduates and postgraduates tended to mostly use their smartphones for 5~10 minutes, 11~20 minutes or 21~30 minutes per time. However, for teenagers aging 13~18, they tended to mostly use their smartphones 21~30 minutes, 31~40 minutes or around 1 hour per time. Surprisingly, there were even 11.7% of teenagers using their smartphones for around 5 hours per time. One of the possible reasons may be that teenagers are not mature enough to restrict their time of using smartphones. Hence, they tend to use smartphones for a longer period of time, compared to the respondents of the other two groups.

In Question 5 and 6 in Part II, among three groups of the respondents, only adults excluding undergraduates and postgraduates had children, which were 118 out of 163 people, and 75% of their children had their own smartphones. Also, in Question 7 and 8 in Part II, 67% of those children got their own smartphones at the age from 13 to 18, and nearly a half and a half of the respondents whose children had their own smartphones thought their children were or were not negatively influenced by smartphones in terms of their health, their social interactions with others, and their physical and mental development, after their children had their own smartphones. Since many of those children have their own smartphones at the age above 12, they are more likely to be less negatively influenced by smartphones due to them becoming more mature enough to control themselves. Apart from this, whether children are negatively influenced by smartphones may be decided by factors such as children's personalities, their ways of doing things, and so forth. For instance, if they have less

self-discipline, they are more likely to be addicted to smartphones and do not control their time in using smartphones. In Question 9 in Part II, for those who thought their children were negatively influenced by smartphones, 19% of their children had poorer eyesight; 16% of their children tended to look down on their smartphones and spoke less when they were in the public places or with family or friends; 15% of their children were addicted to smartphones. These are the top three choices chosen by the parents. It can be indicated that smartphones have potential negative influence on children's eyesight, their social interactions with others and their attention.

In Question 1 and 2 in Part III, 32% of teenagers, 47% of undergraduates and postgraduates, and 48% of adults excluding undergraduates and postgraduates disagreed that their life was not changed or influenced after they had their own smartphones, and 37% of teenagers, 44% of undergraduates and postgraduates, and 41% of adults excluding undergraduates and postgraduates did agree that they became less concentrated after they had their own smartphones. This shows that smartphones do influence people's life, no matter in a positive or negative way. What's more, in Question 3 in Part III, 43% of teenagers and 56% respectively of undergraduates and postgraduates and of adults excluding undergraduates and postgraduates agreed that they suffered from physical pain such as neck pain or back pain after a long period of time of using smartphones. This can be linked back to what is mentioned in the literature review part, which indicates the possible negative influence which smartphones may have on people's health. In Question in Part III, 33% of undergraduates and postgraduates and 34% of adults excluding undergraduates and postgraduates agreed that they had poorer memory after they had their own smartphones, while 38% of teenagers stayed neutral and 35% of them even disagreed with this statement. The reason why relatively most teenagers do not feel themselves having poorer memory may be due to them being still young, so that they are less likely to have bad memory. In Question 5 in Part III, 51% respectively of teenagers and of undergraduates and postgraduates and 49% of adults

excluding undergraduates and postgraduates agreed that they felt their eyes uncomfortable after using smartphones for a long time. This is linked back to the literature review part, which mentions that smartphones may have negative influence on people's eyesight. Interestingly, in Question 6 in Part III, 44% of teenagers aging 13~18 and 47% of adults excluding undergraduates and postgraduates agreed that they had poorer eyesight after they had their own smartphones, while 40% of undergraduates and postgraduates stayed neutral towards this statement. In Question 7 in Part III, 39% of teenagers aging 13~18 and 35% undergraduates and postgraduates agreed that they failed to restrict themselves in controlling the time of using smartphones, while 50% of adults excluding undergraduates and postgraduates mainly disagreed with this statement. This may be due to that adults are more mature so that they can prevent themselves from being over-addicted to smartphones. Another possible reason may be resulted from teenagers and young adults being living in the era in which technology gradually becoming the dominance of the world. Therefore, they inevitably use smartphones more often in order to be connected to the world. In Question 8 in Part III, 40% of undergraduates and postgraduates and 48% of adults excluding undergraduates and postgraduates disagreed that they tended to mostly look down on their smartphones and spoke less when they went out with their family or friends, while 33% of teenagers aging 13~18 stayed neutral and 29% of them agreed with this statement. This shows that teenagers seemly are more likely to be negatively influenced by smartphones in terms of their social interactions with others, let alone children under 12 years old for them being less mature.

In Question 9 and 10 in Part III, 32% of teenagers, 40% of undergraduates and postgraduates and 46% of adults excluding undergraduates and postgraduates agreed that they seldom noticed the surroundings or people around them when they were using their smartphones, and 48% of teenagers, 45% of undergraduates and postgraduates and 43% of adults excluding undergraduates and postgraduates agreed that they tended to use their

smartphones when they were in public or formal places or with people whom they were not familiar with. This is linked back to what is mentioned that people may easily look on using smartphones as a fashion of avoiding embarrassment in the public. In Question 11 in Part III, 40% of teenagers, 62% of undergraduates and postgraduates and 55% of adults excluding undergraduates and postgraduates disagreed that they tended to go out with friends or family, yet chat with the other friends in the chatting rooms on their smartphones. This is somewhat different from what is said in the literature review part. In short, people seem to be less negatively influenced by smartphones in terms of their social interactions with their family and friends. But when they are with strangers or unfamiliar people, they may use smartphones as an excuse to avoid interacting with them. In Question 12 in Part III, 35% of teenagers, 36% of undergraduates and postgraduates and 37% of adults excluding undergraduates and postgraduates agreed that before they had their own smartphones, they felt less awkward for doing nothing when they were in the public transportation or places. This also shows that after smartphones coming out, people tend to use them to avoid the embarrassment and awkwardness in the public places. In Question 13 in Part III, 47% of teenagers, 56% of undergraduates and postgraduates and 50% of adults excluding undergraduates and postgraduates as well agreed that it was impolite for people to mostly look down on their smartphones and speak less when going out or dining with them. In Question 14 in Part III, 40% of teenagers, 49% of undergraduates and postgraduates and 34% of adults excluding undergraduates and postgraduates agreed that using smartphones was a way of avoiding embarrassment in the public. This is linked back to the literature review part as well. However, 36% of teenagers stayed neutral and 33% of adults excluding undergraduates and postgraduates disagreed with this statement. This can be resulted from adults tending to use smartphones less frequently, compared to the younger groups of the respondents. In Question 15 in Part III, 57% of teenagers, 42% of undergraduates and postgraduates and 37% of adults excluding undergraduates and postgraduates stayed neutral

towards the statement that they thought having their own smartphones had more positive than negative influence on their health. Yet, 36% of undergraduates and postgraduates and 31% of adults excluding undergraduates and postgraduates disagreed with this saying. This indicates that people do tend to think that smartphones may have negative influence on people's health. In Question 16 in Part III, 50% of teenagers aging 13~18 and 43% of undergraduates and postgraduates stayed neutral towards the statement that they thought having their own smartphones had more positive than negative influence on their social interactions with others, while 48% of adults excluding undergraduates and postgraduates mostly agreed with this statement. This shows that adults tend to think using smartphones have positive influence on their social interactions with others more. In Question 17 in Part III, 56% of teenagers aging 13~18 and 60% of undergraduates and postgraduates stayed neutral towards the statement that they thought having their own smartphones had more positive than negative influence on their attitude towards life, while 42% of adults excluding undergraduates and postgraduates mostly agreed with this statement. This shows that people tend to think that smartphones have positive influence on them in some aspects.

Last but not least, in Question 1 in Part IV, 77.2% of teenagers, 87.2% of undergraduates and postgraduates and 87.1% of adults excluding undergraduates and postgraduates agreed that children under 12 years old should not have their own smartphones. This is linked back to the topic of this research paper as well as the literature review part. In Question 2 in Part IV, the top three reasons answered by adults excluding undergraduates and postgraduates are: 1) Children are too young to control themselves in using smartphones. 2) Children are easily addicted to smartphones. 3) Smartphones have negative influence on children's eyesight. For undergraduates and postgraduates, their top three reasons are: 1) Smartphones have negative influence on children's eyesight. 2) Children are too young to have their own smartphones. 3) Children need to learn how to interact with others more. As for teenagers aging 13~18, their top three reasons are: 1) Smartphones have negative influence on children's eyesight. 2)

Children are too young to control themselves in using smartphones. 3) Children are too young to have their own smartphones. Interestingly, three groups of the respondents all mention about the considering factor of eyesight in terms of smartphones' negative influence on people, which is linked back to the literature review part as well.

In conclusion, it seems to be unnecessary and unsuitable for children under 12 years old to have their own smartphones. Even though issues or researches relating to smartphones has not been adequate and scientifically approved so far due to it appearing in recent years, yet people still cannot overlook the potential and possible influence which smartphones may have on children's health, their development in learning, and their social interactions with others. Children under 12 years old are still developing themselves mentally and physically, and this stage in life is somewhat important because it may affect their future life as well. Plus, it is no need for children under 12 years old to have their own smartphones as they do not have too much business to be dealt with every day. However, this does not mean that children under 12 years old cannot touch or use smartphones at all. They can still use smartphones, but not the ones which they own. Since people now are living in a technological world, it is impossible for children not to use or get familiar with technological devices at all. Hence, even though children under 12 years old do not necessarily need their own smartphones, they can use their parents' instead. Moreover, children under 12 years old should enjoy themselves exploring the world through interacting with others, reading books, doing some hands-on activities, and so on, rather than merely play with their smartphones. What matters more are their face-to-face social interactions with others and how they develop themselves naturally and healthily through exploring the real world.

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Appendix A: Online Questionnaire (Google Form)

「孩童與智慧型手機」研究之問卷

您好，我是輔仁大學英國語文學系三年級的學生。目前我正在研究「12 歲以下的孩童是否該擁有自己的智慧型手機」，而我非常需要您對於這項議題的寶貴意見，希望您可以撥點時間完成這份問卷。所有問卷的回答內容都將僅供學術的研究與參考，請您放心作答，非常謝謝您願意撥空填寫這份問卷！

學生：輔仁大學英國語文學系 彭春瑜

指導教授：施佑芝 教授

For those who may concern:

Hello, I am a junior in the English Department of Fu Jen Catholic University. I am currently doing a research on the influence of smartphones on children under 12 years old, and I need your precious opinions towards this topic. The answers to this questionnaire will only be used for academic research. Thank you for spending your time doing this survey. I deeply appreciate your help!

Instructor: Prof. Doris Shih

Student: Cindy Peng

第一部分：個人基本資料

Part I. Basic Personal Information

1. 請問您的性別是? What is your gender?

男 Male 女 Female

2. 請問您目前的年齡? How old are you?

- 13~18 歲 13~18 years old
- 19~20 歲 19~20 years old
- 21~30 歲 21~30 years old
- 31~40 歲 31~40 years old
- 41~50 歲 41~50 years old
- 51~60 歲 51~60 years old
- 61~70 歲 61~70 years old
- 71~80 歲 71~80 years old
- 80 歲或以上 80 years old or above

3. 請問您目前的職業是? What is your profession?

- 金融/保險 Finance/ Insurance
- 房地產 Real estate
- 政府機關 Governmental Institutions
- 軍警 Military men/ Policemen
- 教育/研究 Education/ Researchers
- 經商 Businessmen
- 建築 Constructors
- 製造/供應商 Manufacturers/ Suppliers
- 資訊 Information
- 服務 Service industry
- 醫療 Medical-related
- 法律相關行業 Law-related
- 流通/零商 Retail sale
- 交通/運輸/旅遊 Transportation / Travel
- 娛樂/出版 Entertainment / Publishers

- 傳播/公共關係廣告/行銷 Mass media / Sales / Public relations
- 藝術 Art
- 農漁牧 Agriculture/Fishery/Poultry
- 學生 Students
- 家管 House keepers
- 待業中 Job seeking
- 其他：_____ Other:_____

第二部分：手機的使用狀況

Part II. The Usage of Smartphones

1. 請問您目前擁有自己的智慧型手機嗎? Currently, do you have your own smartphone?
 - 有 Yes (continue to answer question 2) 沒有 No (skip to question 5)
2. 請問您是在幾歲的時候，開始擁有自己的智慧型手機? If you do, what age did you start to have your own smartphone?
 - 0~5 歲 0~5 years old
 - 6~12 歲 6~12 years old
 - 13~18 歲 13~18 years old
 - 19~20 歲 19~20 years old
 - 21~30 歲 21~30 years old
 - 31~40 歲 31~40 years old
 - 41~50 歲 41~50 years old
 - 51~60 歲 51~60 years old
 - 61~70 歲 61~70 years old
 - 71~80 歲 71~80 years old
 - 80 歲或以上 80 years old or above
3. 請問您一次使用智慧型手機的頻率約是多長呢? (排除打電話或檢查電子郵件/簡訊

的時間) How long do you use your smartphone per time? (Except for the time when you make a phone call or check the text messages or email)

- 5~10 分鐘 5~10 minutes
- 11~20 分鐘 11~20 minutes
- 21~30 分鐘 21~30 minutes
- 31~40 分鐘 31~40 minutes
- 41~50 分鐘 41~50 minutes
- 51~59 分鐘 51~59 minutes
- 1 個小時左右 Around 1 hour
- 2 個小時左右 Around 2 hours
- 3 個小時左右 Around 3 hours
- 4 個小時左右 Around 4 hours
- 5 個小時左右 Around 5 hours
- 其他：_____ Other:_____

4. 請問您大部分都使用您的智慧型手機做什麼呢? (複選題：至多選 3 個選項) What do you mostly do with your smartphone? (Multi-select: no more than 3 choices)

- 在線上聊天室裡與朋友們聊天 Chat with friends in the online chatting rooms
- 在網路上搜尋資訊 Search for information on the Internet
- 檢查每日的新聞 Check the daily news
- 使用社群網站 (如：Facebook, Tumblr, Twitter, PTT 等) 或 APP (如：Line, Instagram, Kakao Talk 等) Use community websites (ex. Facebook, Tumblr, Twitter, PTT, etc.) or Apps (Line, Instagram, Kakao Talk, etc.)
- 閱讀部落格文章, 電子書, 線上漫畫或雜誌等 Read the articles of bloggers, e-books, online comics or online magazines, etc.
- 看影片或線上電影 Watch videos or online movies
- 傳送電子郵件或簡訊 Send emails or text messages

- 打電話 Make phone calls
- 拍照片 Take photos
- 使用線上或 APP 的字典 Use online dictionaries or those of APP
- 玩遊戲 Play games
- 工作需求 For work
- 其他：_____ Other:_____

5. 請問您有孩子嗎? Do you have any children?

- 有 Yes (continue to answer question 6) 沒有 No (skip to Part III.)

6. 請問您的孩子有智慧型手機嗎? (如果您有一個以上的孩子，請視其中一個的情形作答) If you do, do your children have smartphones? (If you have more than one child, choose one of them to be taken into consideration.)

- 有 Yes (continue to answer question 7) 沒有 No skip to Part III.)

7. 請問您的孩子於幾歲的時候，開始擁有他們自己的智慧型手機? If they have smartphones, what age did they start to have their own ones?

- 0~5 歲 0~5 years old
- 6~12 歲 6~12 years old
- 13~18 歲 13~18 years old
- 19~20 歲 19~20 years old
- 21~30 歲 21~30 years old
- 31~40 歲 31~40 years old

- 其他：_____ Other:_____

8. 請問在您的孩子擁有他們自己的智慧型手機後，他們有受到智慧型手機的負面影響嗎? (就他們的健康，與他人的社會互動情形和他們的身/心理發展而言) After your children have their own smartphones, are they negatively influenced by smartphones in terms of their health, social interactions with others and their physical and mental development?

有 Yes (continue to answer question 9) 沒有 No (skip to Part III.)

9. 請問您的孩子主要受到智慧型手機哪些負面的影響呢? (複選題：至多選 3 個選項)

If they are, in what negative ways are they mostly influenced by smartphones?

(Multi-select: no more than 3)

他們在學校課業或閱讀篇幅長的文章等的專注力比較差。

They are less concentrated on schoolwork, reading long articles, etc.

他們的視力變差了。 They have poorer eyesight.

他們的姿勢不良。(如：駝背、眼睛離手機螢幕太近等)

They have inappropriate postures. (ex. have a humpback, put smartphones too closely to their eyes, etc.)

當他們在公開場合被要求不使用智慧型手機而必須和他人談話時，他們會感到不自在或不舒服。

They feel uncomfortable when they are not able to use smartphones and have to speak to others in the public.

他們不能很順利地記憶新訊息。 They cannot memorize things properly.

他們比較少注意到自己周遭的人事物。

They pay less attention to the surroundings and people around them.

當他們在公共場合或與家人朋友在一起時，傾向低頭划手機而且很少說話。

They tend to look down on their smartphones and speak less when they are in the public places or with family or friends.

他們傾向睡前躺在床上划手機。

They tend to use smartphones on the bed before they fall asleep.

他們使用智慧型手機上癮了。(沒辦法不用智慧型手機)

They are addicted to smartphones.

其他：_____ Other:_____

第三部分：個人對於下列敘述的意見

Part III. Personal Opinions towards these Statements

請閱讀下列的敘述，並選擇最符合您狀況的選項。 <i>Please read the following statements and circle the option best fits you.</i>	非常同意 Strongly Agree	同意 Agree	沒意見 Neutral	不同意 Disagree	非常不同意 Strongly Disagree
1. 自從擁有自己的智慧型手機後，我的人生或生活並沒有受到影響。 My life is not changed or influenced after I have my own smartphones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. 自從我擁有自己的智慧型手機後，我的專注力下降了。 I become less concentrated after I have my own smartphones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. 花太長的時間在使用智慧型手機後，我會感到生理上的疼痛，如：脖子痛、腰痠背痛等。 I suffer from physical pain such as neck pain or back pain after a long period of time of using smartphones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 自從我擁有自己的智慧型手機後，我的記憶力變得更差了。 I have poorer memory after I have my own smartphones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. 花太長的時間在使用智慧型手機後，我會感到眼睛不舒服。 I feel my eyes uncomfortable after using smartphones for a long time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

請閱讀下列的敘述，並選擇最符合您狀況的選項。 <i>Please read the following statements and circle the option best fits you.</i>	非常同意 Strongly Agree	同意 Agree	沒意見 Neutral	不同意 Disagree	非常不同意 Strongly Disagree
6. 花太長的時間在使用智慧型手機後，我的視力退步了。 I have poorer eyesight after I have my own smartphones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 我沒辦法嚴格控制自己使用智慧型手機的時間。 I fail to restrict myself in controlling the time of using smartphones.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 當我和家人或朋友出去時，我常常都一直低頭划手機。 I tend to mostly look down on my smartphones and speak less when I go out with my friends or family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 當我正在使用智慧型手機的時候，我很少注意到我周遭的人事物。 I seldom notice the surroundings or people around me when I am using my smartphones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 當我在公共場合或與不熟識的人在一起時，我傾向於使用智慧型手機。 I tend to use my smartphones when I am in public or formal places or with people whom I am not familiar with.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. 當我與家人或朋友出去吃飯聊天時，我常常用手機和另一頭的朋友聊天，而不是和					

<p>他們說話。 I tend to go out with friends or family, yet chat with the other friends in the chatting rooms on my smartphones.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>請閱讀下列的敘述，並選擇最符合您狀況的選項。 <i>Please read the following statements and circle the option best fits you.</i></p>	非常同意 Strongly Agree	同意 Agree	沒意見 Neutral	不同意 Disagree	非常不同意 Strongly Disagree
<p>12. 在我擁有自己的智慧型手機之前，我會覺得在公共場合或搭乘大眾運輸交通時，不做任何事情不是一件奇怪的事。 Before I have my own smartphones, I feel less awkward for doing nothing when I am in the public transportation or places.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>13. 當和別人出去時，如果他們一直低頭划手機而且幾乎都不說話，我會覺得這樣很沒禮貌。 I think it is impolite for people to mostly look down on their smartphones and speak less when going out or dining with them.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>14. 在公共場合使用智慧型手機是一種避免尷尬的方式。 Using smartphones is a way of avoiding embarrassment in the public.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>15. 我覺得擁有自己的智慧型手機後，對於我的健康有比較正面的影響。 I think having my own smartphones have</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

more positive than negative influence on my health.					
請閱讀下列的敘述，並選擇最符合您狀況的選項。 <i>Please read the following statements and circle the option best fits you.</i>	非常同意 Strongly Agree	同意 Agree	沒意見 Neutral	不同意 Disagree	非常不同意 Strongly Disagree
16. 我覺得擁有自己的智慧型手機後，對於我與他人間的社會互動有比較正面的影響。 I think having my own smartphones have more positive than negative influence on my social interactions with others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. 我覺得擁有自己的智慧型手機後，對於我的生活/人生態度有比較正面的影響。 I think having my own smartphones have more positive than negative influence on my attitude towards life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

第四部份：個人對於孩童擁有智慧型手機的意見

Part IV. Personal Opinions towards Children Owning Smartphones

- 請問您覺得 12 歲以下的孩童應該擁有他們自己的智慧型手機嗎? Do you think children under 12 years old should have their own smartphones?
 - 12 歲以下的孩童應該擁有他們自己的智慧型手機。 Yes
 - 12 歲以下的孩童不應該擁有他們自己的智慧型手機。 No
 - 我沒意見。 No comment
 - 請解釋您選擇這個選項的原因。 Please explain the reasons why.
-

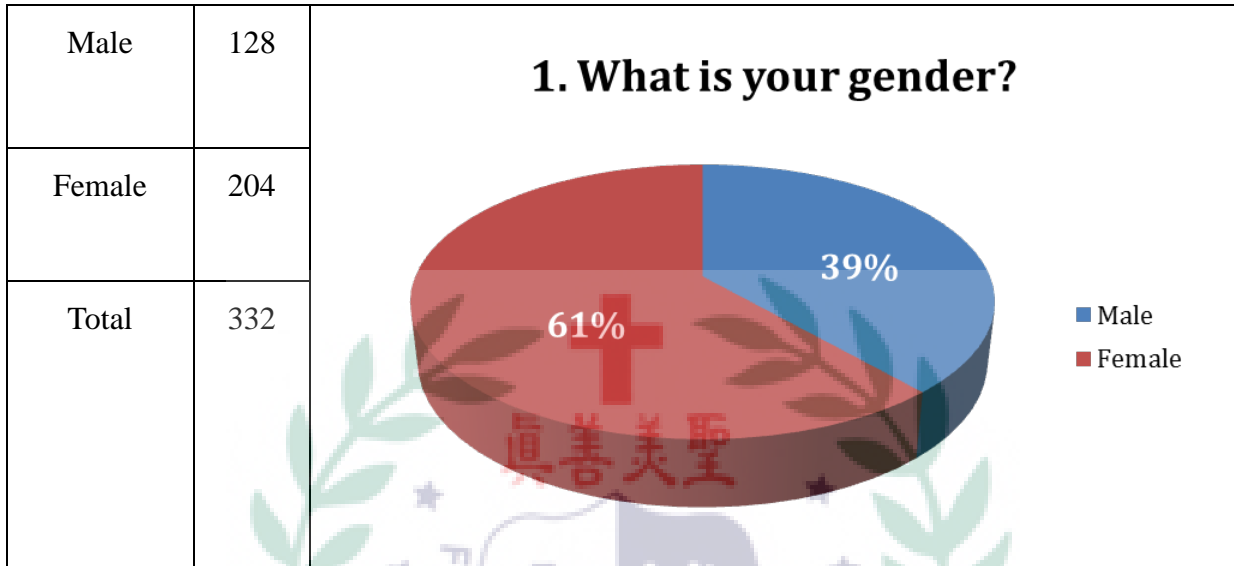
3. 如果您對於這份問卷有其他的意見、想法或是對於問卷的問題有疑慮處，請於下方陳述您的意見。(您也可以選擇略過這一題。) If you have any other opinions towards this questionnaire, please describe below, or you may also skip it as well. (e.g. What should be improved, doubt about the questions asked in the questionnaire, etc.)
-



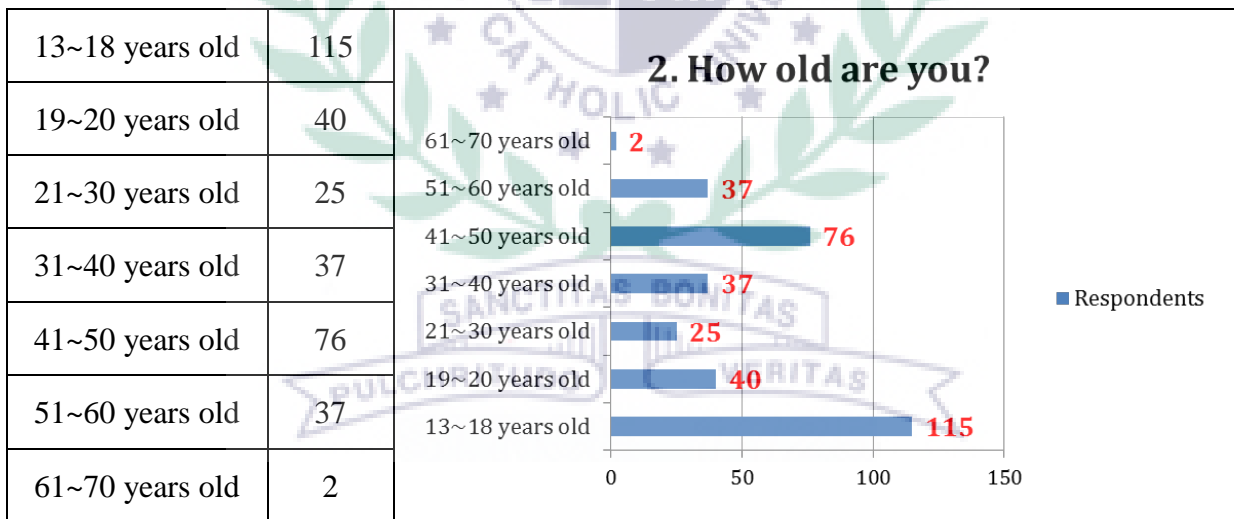
Appendix B: Data Collection and Analysis

Part I. Basic Personal Information

1. What is your gender?

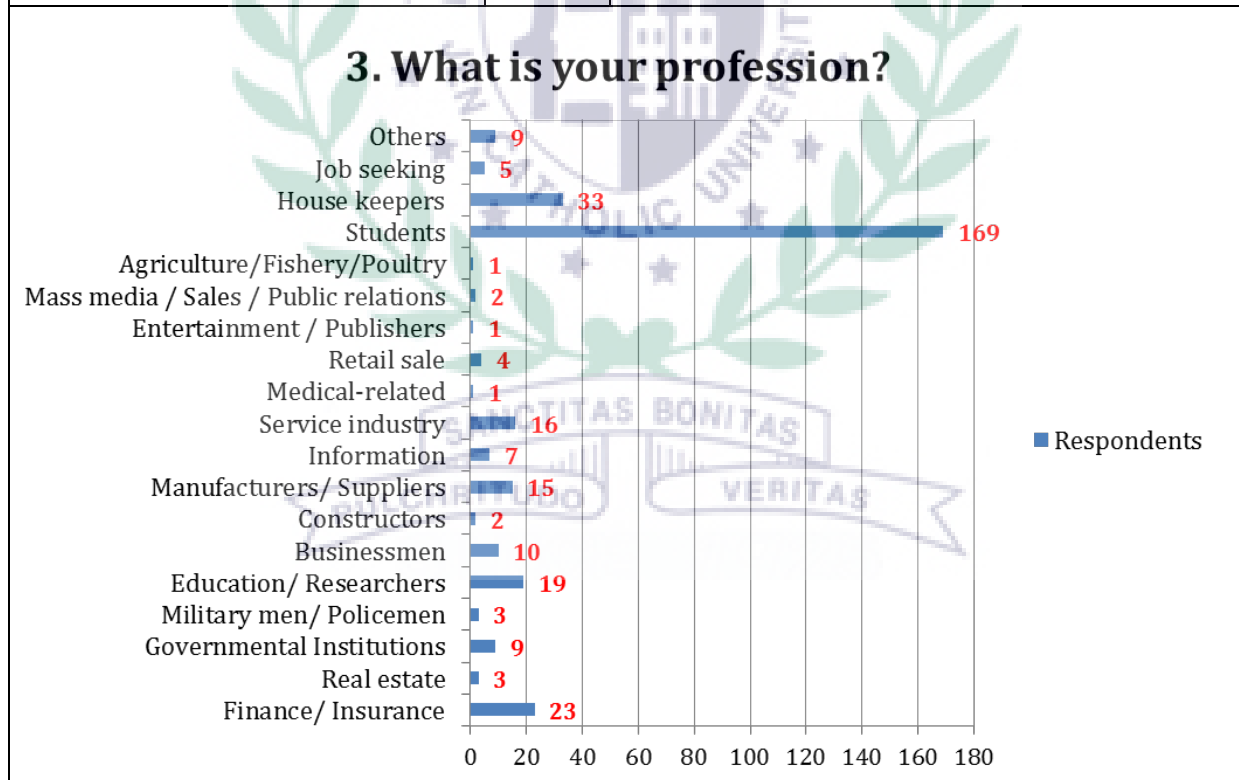


2. How old are you?

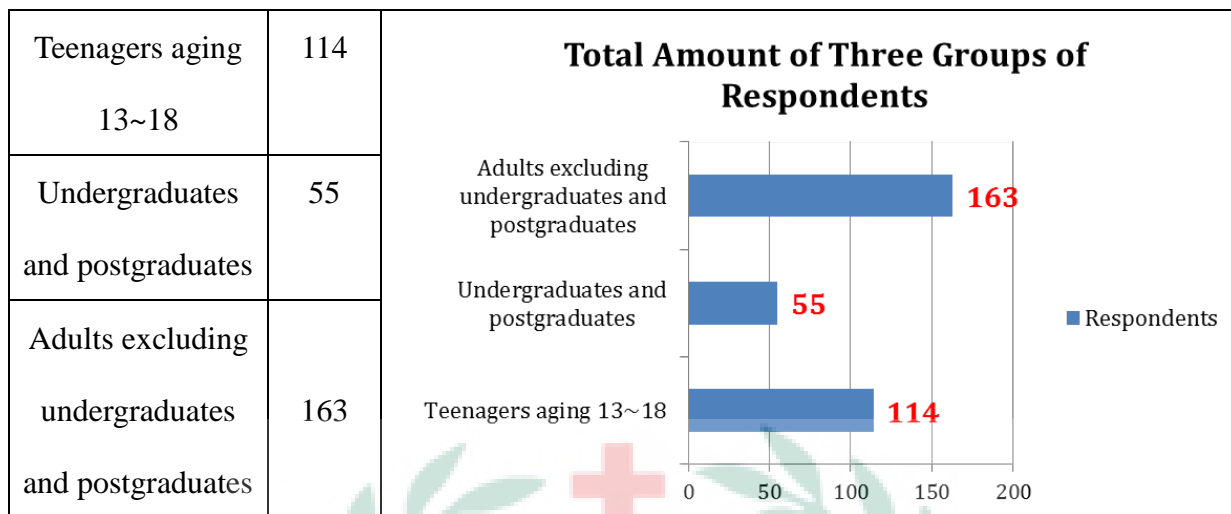


3. What is your profession?

Finance/ Insurance	23	Medical-related	1
Real estate	3	Retail sale	4
Governmental Institutions	9	Entertainment/ Publishers	1
Military men/ Policemen	3	Mass media/ Sales/ Public relations	2
Education/ Researchers	19	Agriculture/ Fishery/ Poultry	1
Businessmen	10	Students	169
Constructors	2	House keepers	33
Manufacturers/ Suppliers	15	Job seeking	5
Information	7	Others	9
Service industry	16		



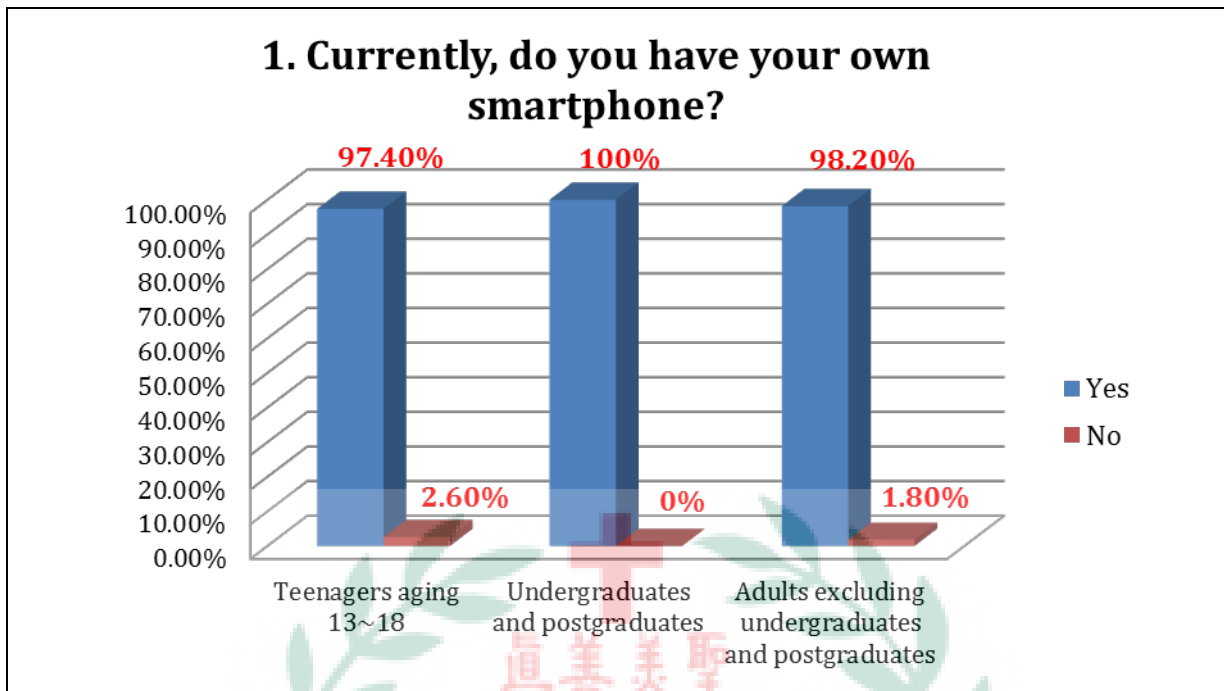
The Total Amount of Three Group of Respondents



Part II. The Usage of Smartphones

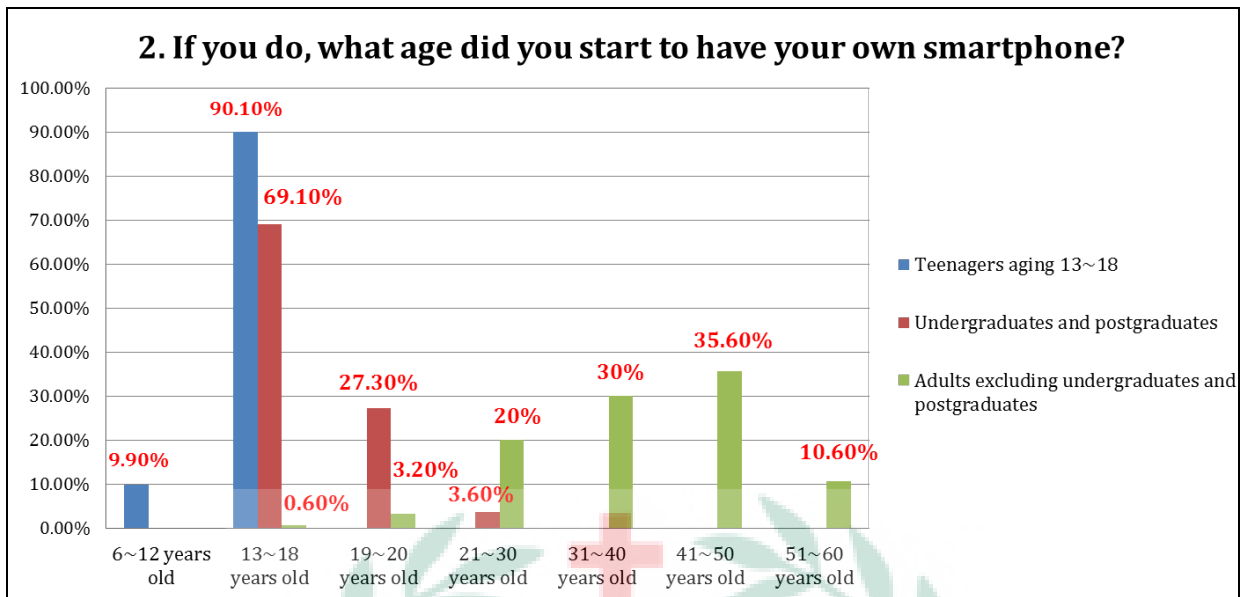
1. Currently, do you have your own smartphones?

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Yes	111 (97.40%)	55 (100%)	160 (98.2%)
No	3 (2.60%)	0 (0%)	3 (1.80%)
Total	114 (100%)	55 (100%)	163 (100%)



2. If you do, what age did you start to have your own smartphone?

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
6~12 years old	11 (9.90%)	0 (0%)	0 (0%)
13~18 years old	100 (90.10%)	38 (69.10%)	1 (0.60%)
19~20 years old	0 (0%)	15 (27.30%)	5 (3.20%)
21~30 years old	0 (0%)	2 (3.60%)	32 (20%)
31~40 years old	0 (0%)	0 (0%)	48 (30%)
41~50 years old	0 (0%)	0 (0%)	57 (35.6%)
51~60 years old	0 (0%)	0 (0%)	17 (10.6%)
Total	111 (100%)	55 (100%)	160 (100%)

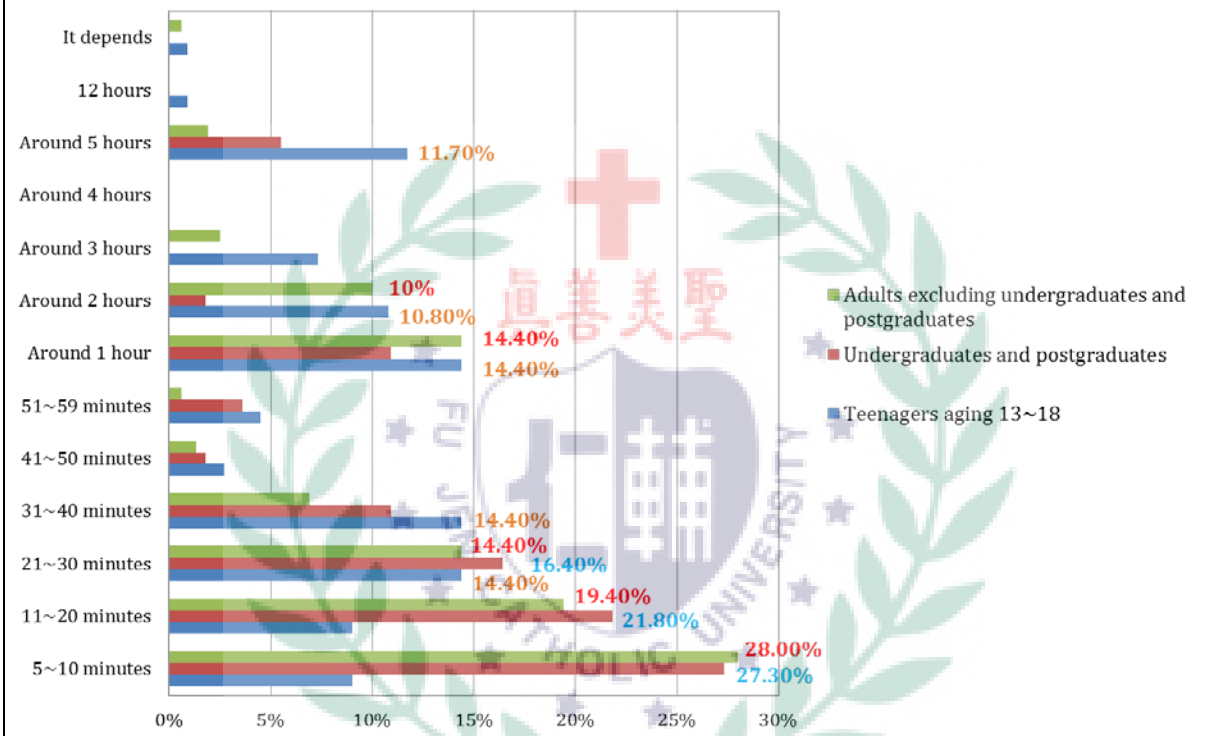


3. How long do you use your smartphone per time? (Except for the time when you make a phone call or check the text messages or email)

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
5~10 minutes	10 (9%)	15 (27.30%)	45 (28.00%)
11~20 minutes	10 (9%)	12 (21.80%)	31 (19.40%)
21~30 minutes	16 (14.40%)	9 (16.40%)	23 (14.40%)
31~40 minutes	16 (14.40%)	6 (10.90%)	11 (6.90%)
41~50 minutes	3 (2.70%)	1 (1.80%)	2 (1.30%)
51~59 minutes	5 (4.50%)	2 (3.60%)	1 (0.60%)
Around 1 hour	16 (14.40%)	6 (10.90%)	23 (14.40%)
Around 2 hours	12 (10.80%)	1 (1.80%)	16 (10%)
Around 3 hours	8 (7.30%)	0 (0%)	4 (2.50%)
Around 4 hours	0 (0%)	0 (0%)	0 (0%)
Around 5 hours	13 (11.70%)	3 (5.50%)	3 (1.90%)

12 hours	1 (0.90%)	0 (0%)	0 (0%)
It depends	1 (0.90%)	0 (0%)	1 (0.60%)
Total	111 (100%)	55 (100%)	160 (100%)

**3. How long do you use your smartphone per time?
(Except for the time when you make a phone call or check the text messages or email)**

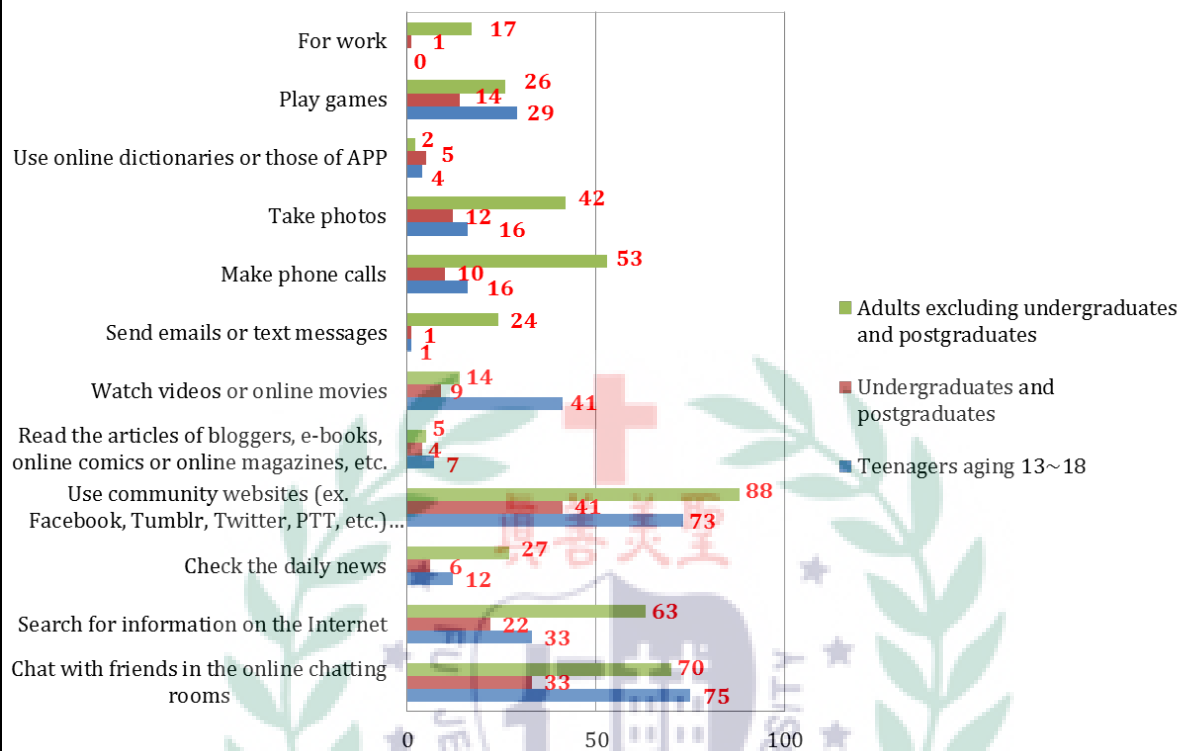


4. What do you mostly do with your smartphone? (Multi-select: no more than 3 choices)

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Chat with friends in the online chatting rooms	75	33	70
Search for information on the	33	22	63

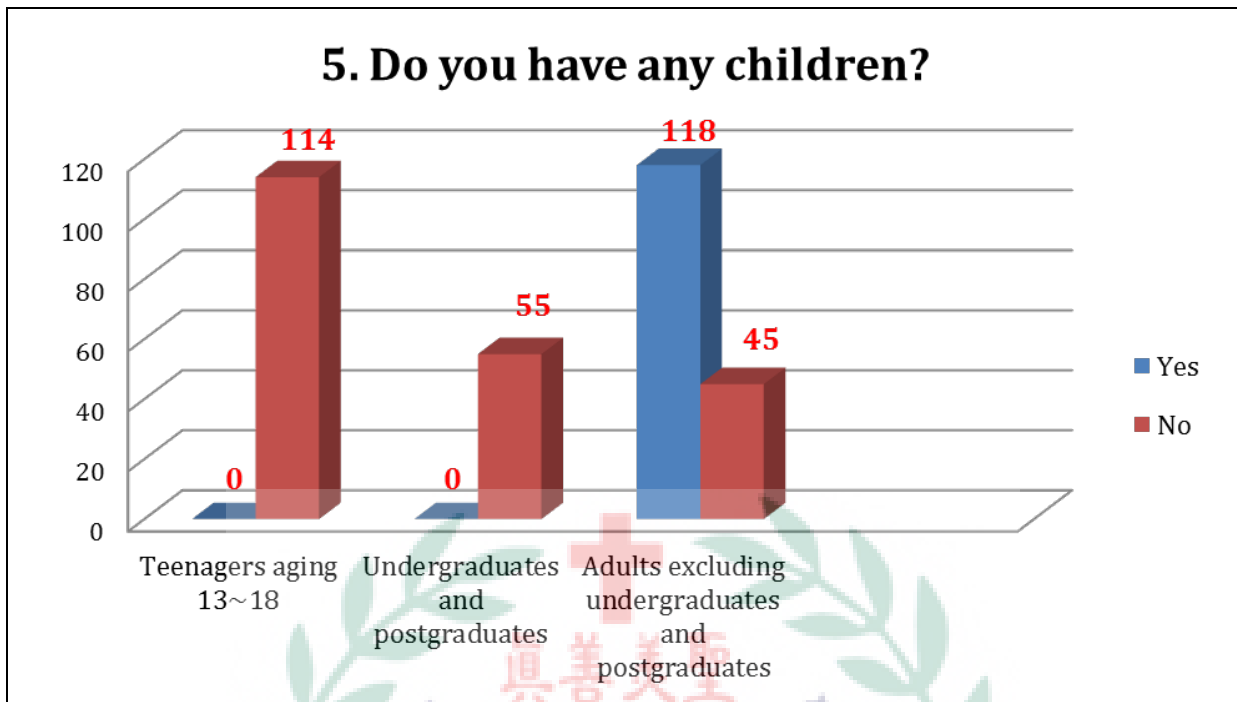
Internet			
Check the daily news	12	6	27
Use community websites (ex. Facebook, Tumblr, Twitter, PTT, etc.) or Apps (Line, Instagram, Kakao Talk, etc.)	73	41	88
Read the articles of bloggers, e-books, online comics or online magazines, etc.	7	4	5
Watch videos or online movies	41	9	14
Send emails or text messages	1	1	24
Make phone calls	16	10	53
Take photos	16	12	42
Use online dictionaries or those of APP	4	5	2
Play games	29	14	26
For work	0	1	17

4. What do you mostly do with your smartphone? (Multi-select: no more than 3 choices)

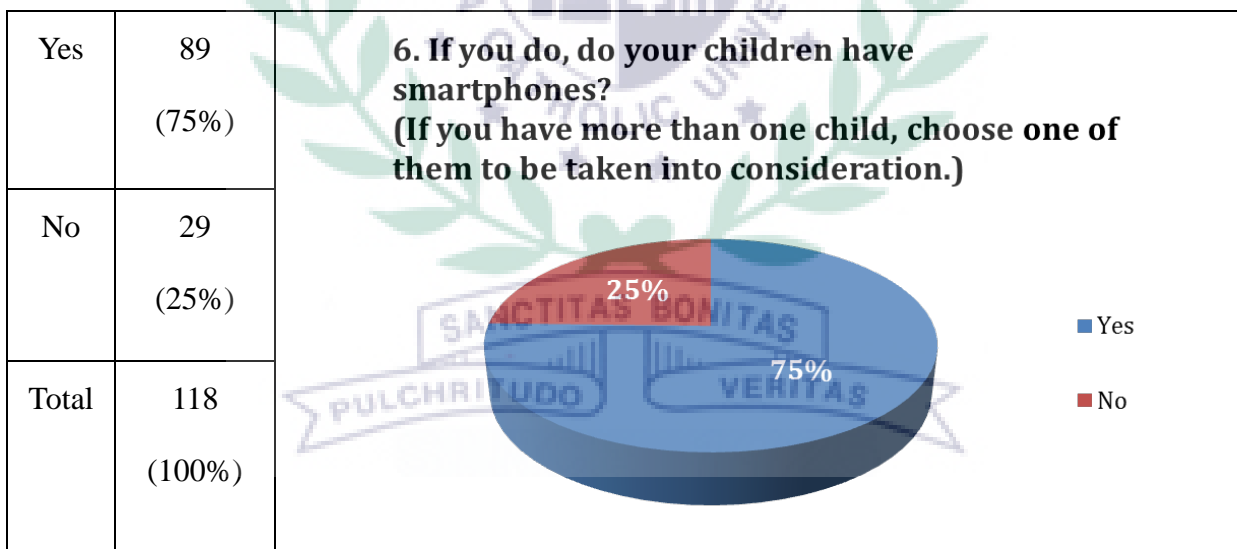


5. Do you have any children?

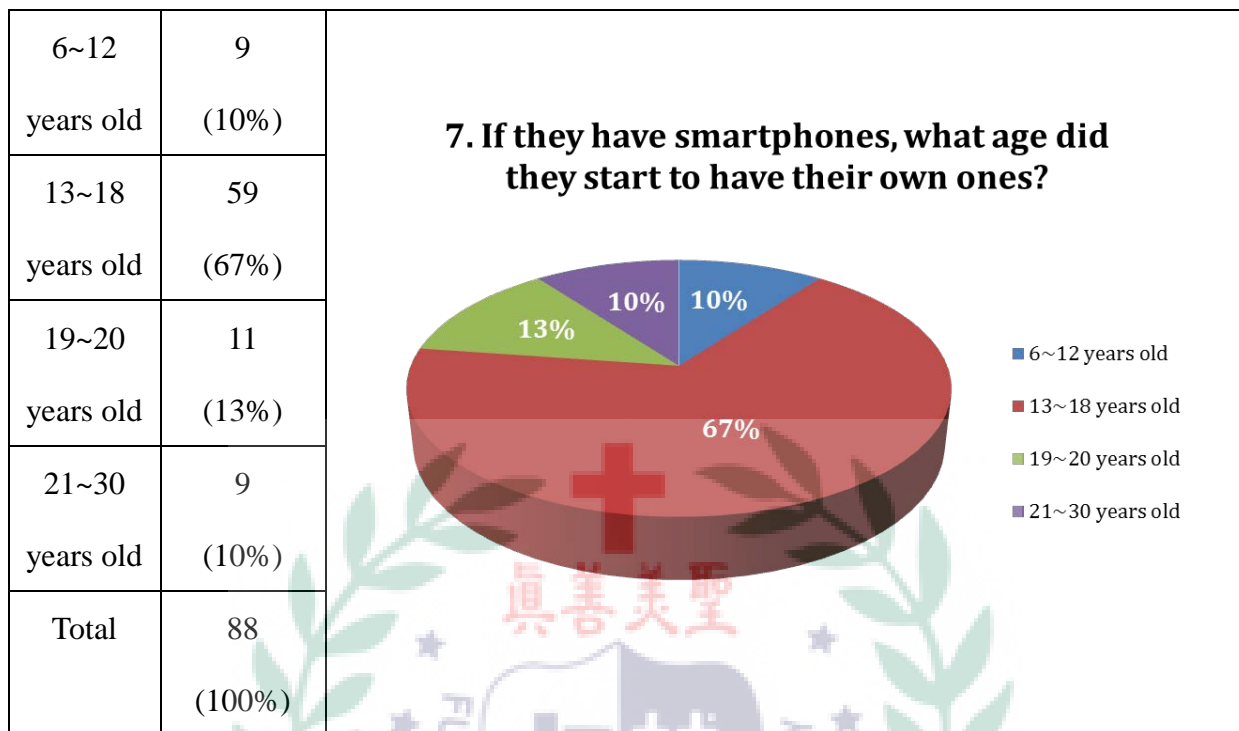
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Yes	0	0	118
No	114	55	45



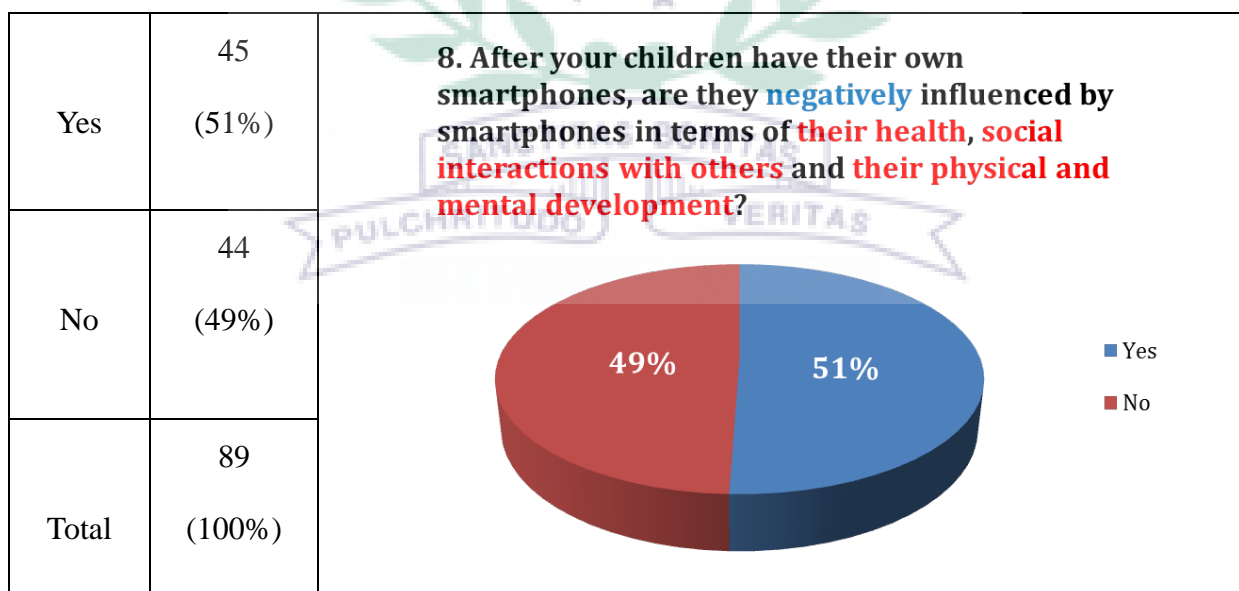
6. If you do, do your children have smartphones? (If you have more than one child, choose one of them to be taken into consideration.)



7. If they have smartphones, what age did they start to have their own ones?



8. After your children have their own smartphones, are they negatively influenced by smartphones in terms of their health, social interactions with others and their physical and mental development?

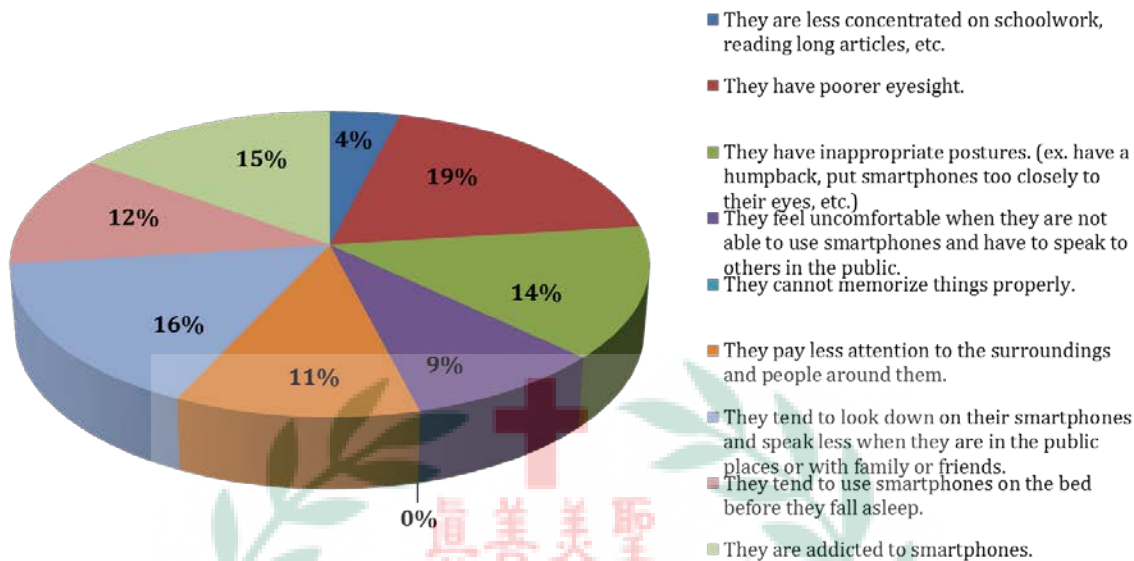


9. If they are, in what negative ways are they mostly influenced by smartphones?

(Multi-select: no more than 3)

They are less concentrated on schoolwork, reading long articles, etc.	5 (4%)
They have poorer eyesight.	24 (19%)
They have inappropriate postures. (ex. have a humpback, put smartphones too closely to their eyes, etc.)	17 (14%)
They feel uncomfortable when they are not able to use smartphones and have to speak to others in the public.	11 (9%)
They cannot memorize things properly.	0 (0%)
They pay less attention to the surroundings and people around them.	14 (11%)
They tend to look down on their smartphones and speak less when they are in the public places or with family or friends.	20 (16%)
They tend to use smartphones on the bed before they fall asleep.	15 (12%)
They are addicted to smartphones.	19 (15%)
Total	125 (100%)

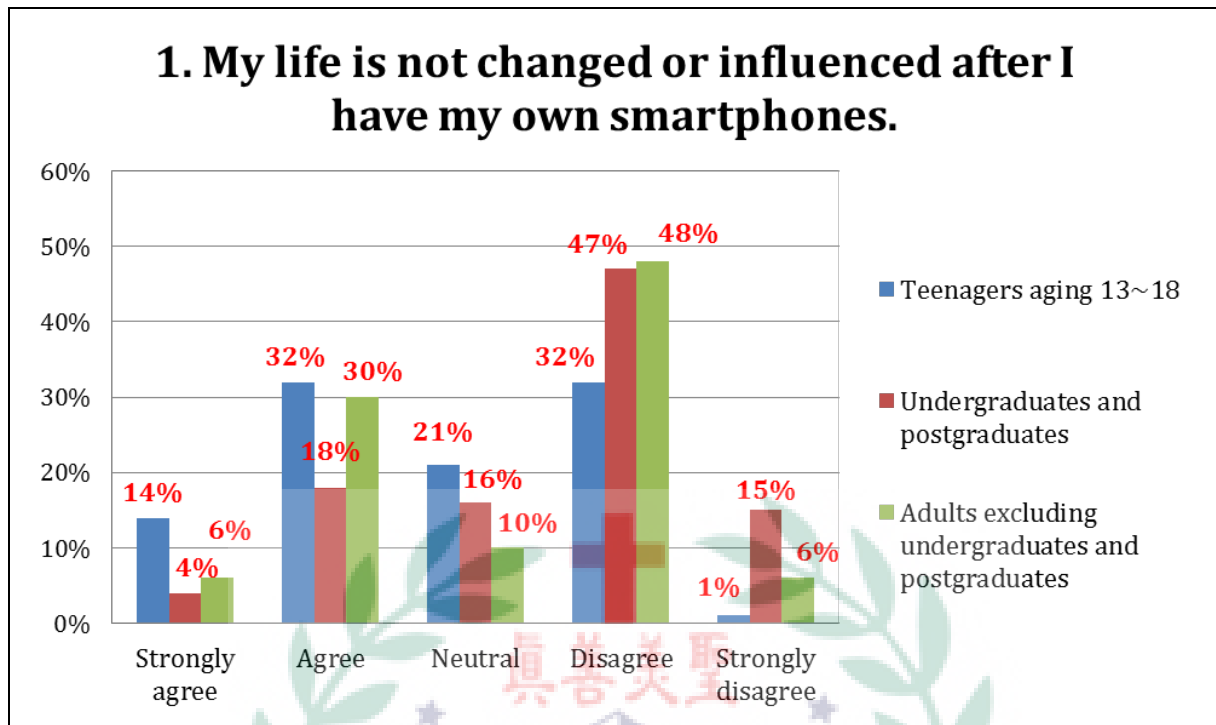
9. If they are, in what **negative ways are they mostly influenced by smartphones? (Multi-select: no more than 3)**



Part III. Personal Opinions towards these Statements

1. My life is not changed or influenced after I have my own smartphones.

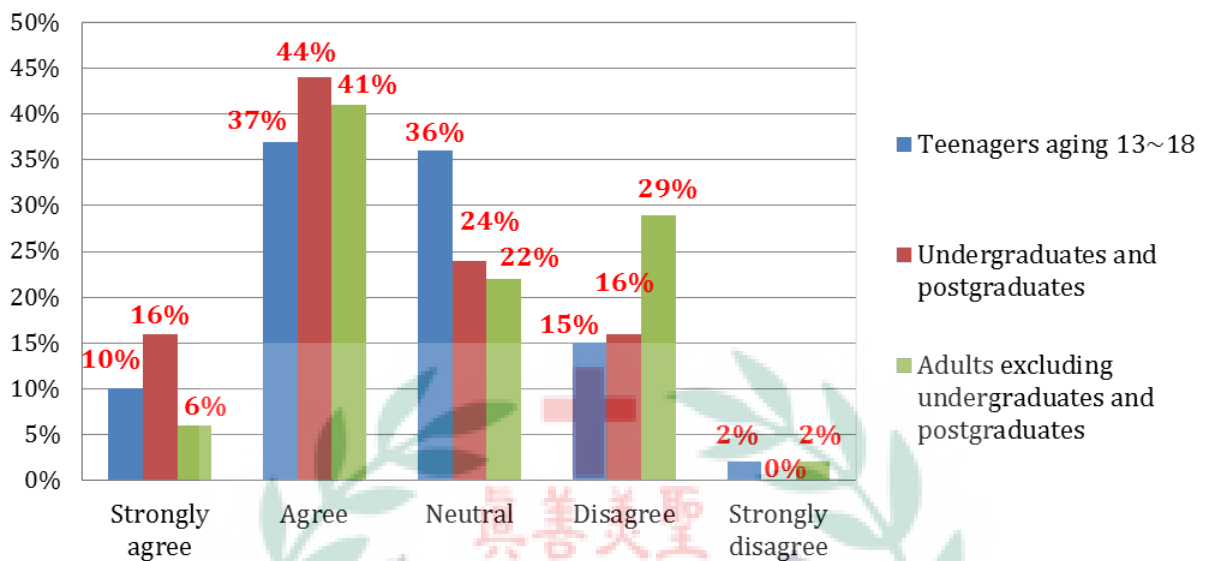
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	16 (14%)	2 (4%)	10 (6%)
Agree	37 (32%)	10 (18%)	49 (30%)
Neutral	24 (21%)	9 (16%)	16 (10%)
Disagree	36 (32%)	26 (47%)	79 (48%)
Strongly Disagree	1 (1%)	8 (15%)	9 (6%)
Total	114 (100%)	55 (100%)	163 (100%)



2. I become less concentrated after I have my own smartphones.

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	11 (10%)	9 (16%)	10 (6%)
Agree	42 (37%)	24 (44%)	67 (41%)
Neutral	41 (36%)	13 (24%)	35 (22%)
Disagree	17 (15%)	9 (16%)	47 (29%)
Strongly Disagree	3 (2%)	0 (0%)	4 (2%)
Total	114 (100%)	55 (100%)	163 (100%)

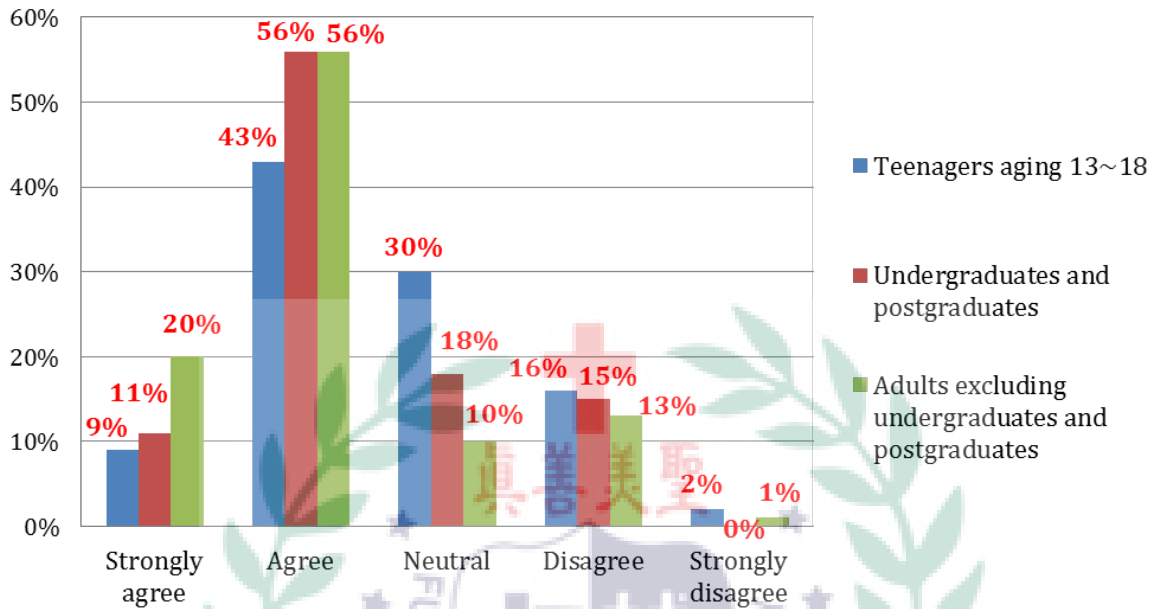
2. I become less concentrated after I have my own smartphones.



3. I suffer from physical pain such as neck pain or back pain after a long period of time of using smartphones.

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	10 (9%)	6 (11%)	33 (20%)
Agree	49 (43%)	31 (56%)	91 (56%)
Neutral	35 (30%)	10 (18%)	16 (10%)
Disagree	18 (16%)	8 (15%)	21 (13%)
Strongly Disagree	2 (2%)	0 (0%)	2 (1%)
Total	114 (100%)	55 (100%)	163 (100%)

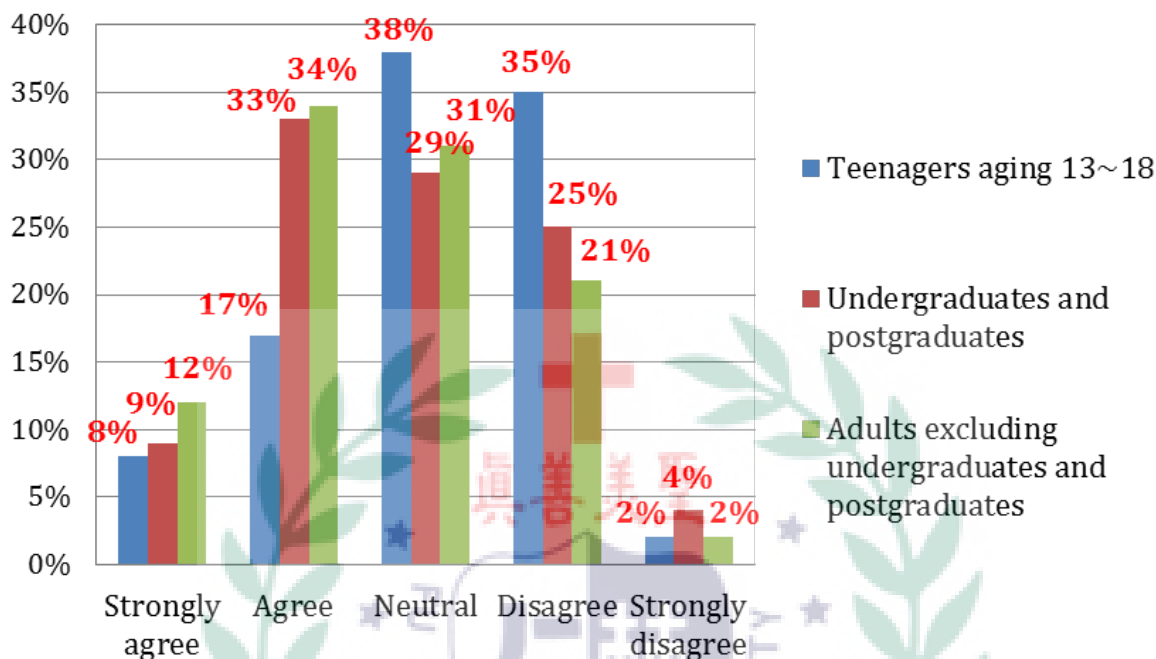
3. I suffer from physical pain such as neck pain or back pain after a long period of time of using smartphones.



4. I have poorer memory after I have my own smartphones.

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	9 (8%)	5 (9%)	19 (12%)
Agree	19 (17%)	18 (33%)	55 (34%)
Neutral	43 (38%)	16 (29%)	51 (31%)
Disagree	40 (35%)	14 (25%)	35 (21%)
Strongly Disagree	3 (2%)	2 (4%)	3 (2%)
Total	114 (100%)	55 (100%)	163 (100%)

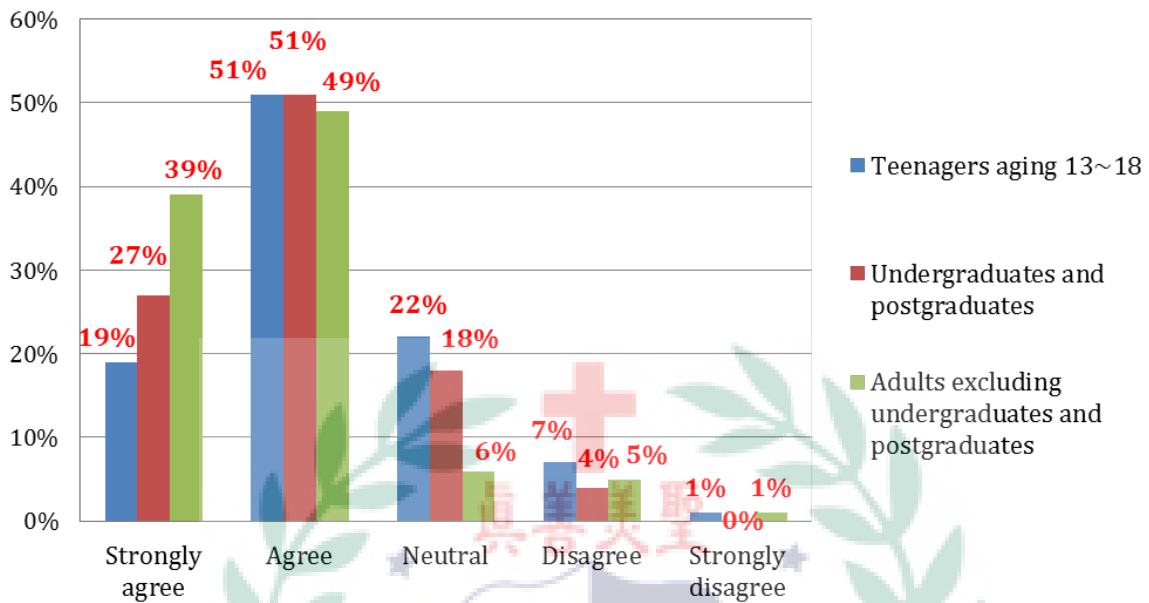
4. I have poorer memory after I have my own smartphones.



5. I feel my eyes uncomfortable after using smartphones for a long time.

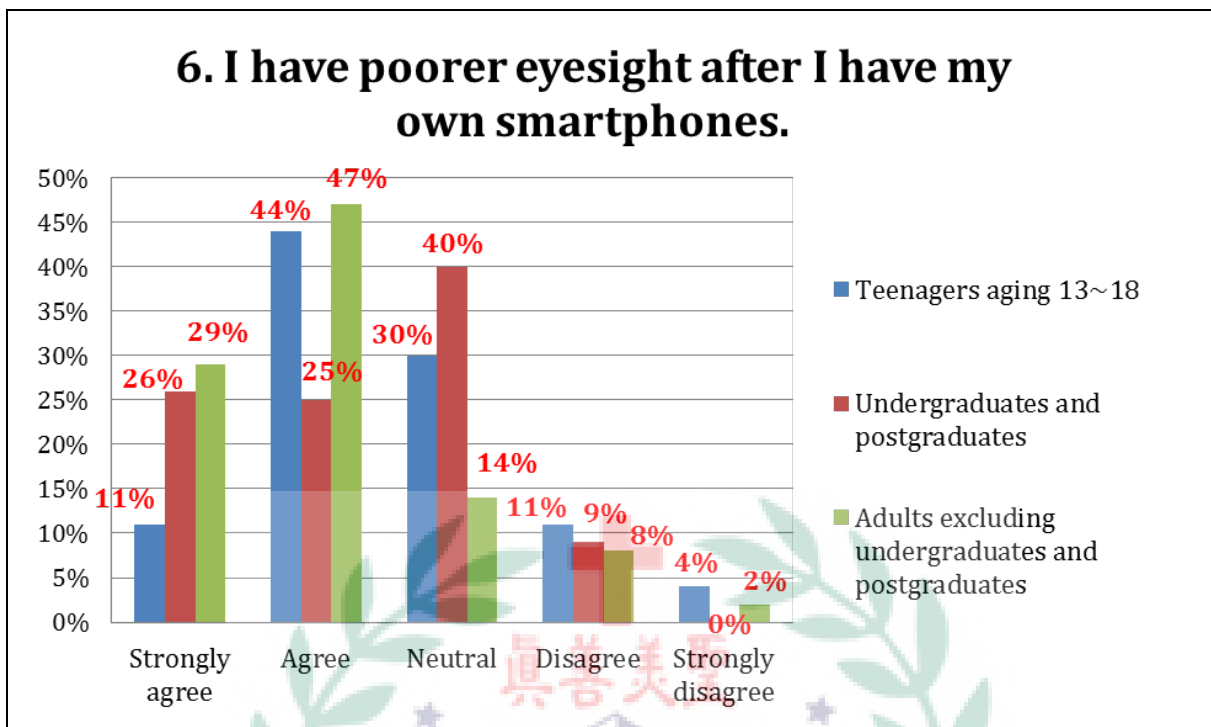
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	22 (19%)	15 (27%)	64 (39%)
Agree	58 (51%)	28 (51%)	80 (49%)
Neutral	25 (22%)	10 (18%)	10 (6%)
Disagree	8 (7%)	2 (4%)	7 (5%)
Strongly Disagree	1 (1%)	0 (0%)	2 (1%)
Total	114 (100%)	55 (100%)	163 (100%)

5. I feel my eyes uncomfortable after using smartphones for a long time.



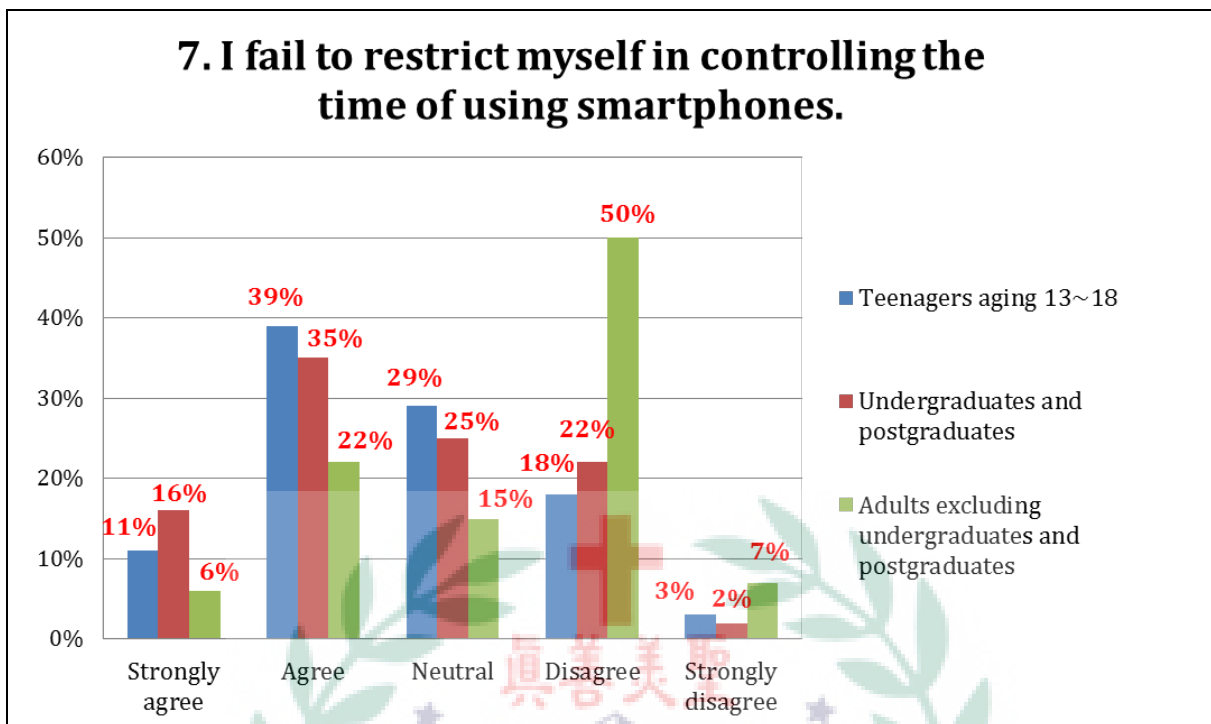
6. I have poorer eyesight after I have my own smartphones.

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	13 (11%)	14 (26%)	48 (29%)
Agree	50 (44%)	14 (25%)	76 (47%)
Neutral	34 (30%)	22 (40%)	23 (14%)
Disagree	13 (11%)	5 (9%)	13 (8%)
Strongly Disagree	4 (4%)	0 (0%)	3 (2%)
Total	114 (100%)	55 (100%)	163 (100%)



7. I fail to restrict myself in controlling the time of using smartphones.

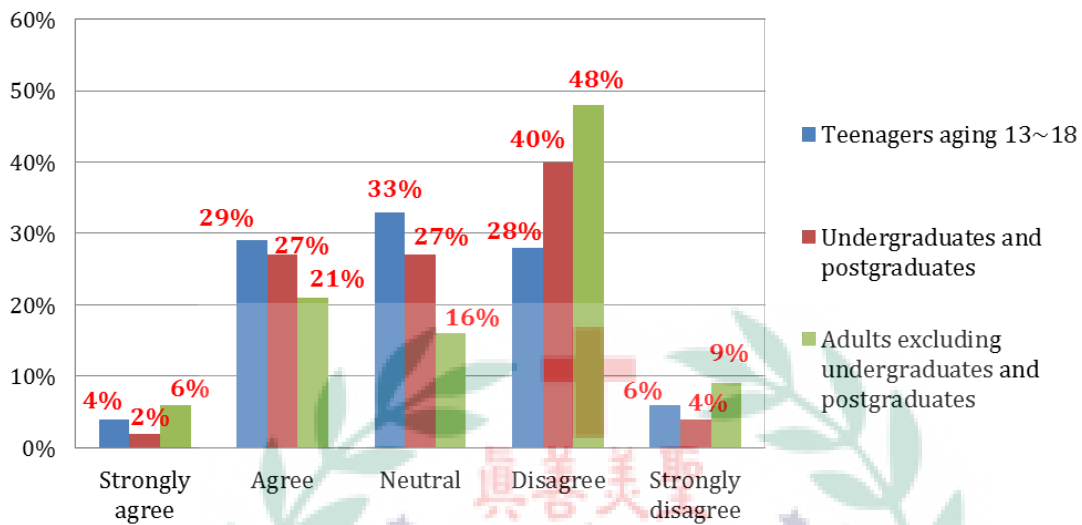
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	12 (11%)	9 (16%)	9 (6%)
Agree	44 (39%)	19 (35%)	36 (22%)
Neutral	33 (29%)	14 (25%)	25 (15%)
Disagree	21 (18%)	12 (22%)	81 (50%)
Strongly Disagree	4 (3%)	1 (2%)	12 (7%)
Total	114 (100%)	55 (100%)	163 (100%)



8. I tend to mostly look down on my smartphones and speak less when I go out with my friends or family.

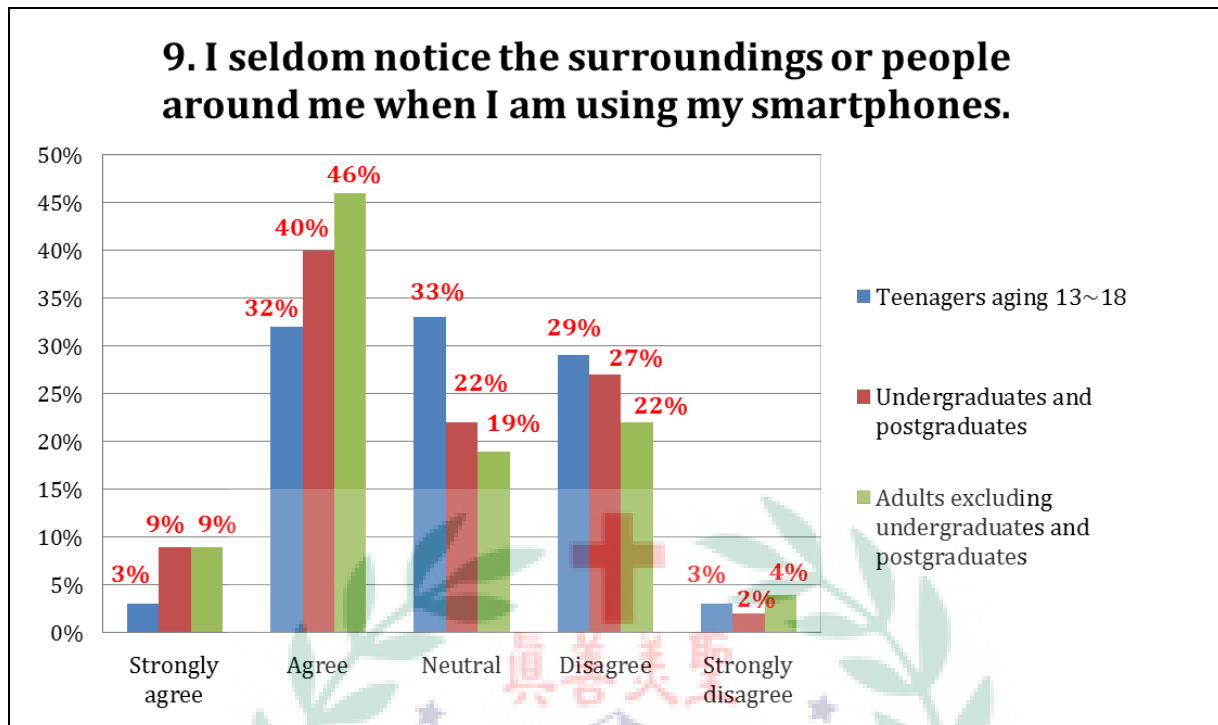
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	5 (4%)	1 (2%)	9 (6%)
Agree	33 (29%)	15 (27%)	35 (21%)
Neutral	37 (33%)	15 (27%)	26 (16%)
Disagree	32 (28%)	22 (40%)	78 (48%)
Strongly Disagree	7 (6%)	2 (4%)	15 (9%)
Total	114 (100%)	55 (100%)	163 (100%)

8. I tend to mostly look down on my smartphones and speak less when I go out with my friends or family.



9. I seldom notice the surroundings or people around me when I am using my smartphones.

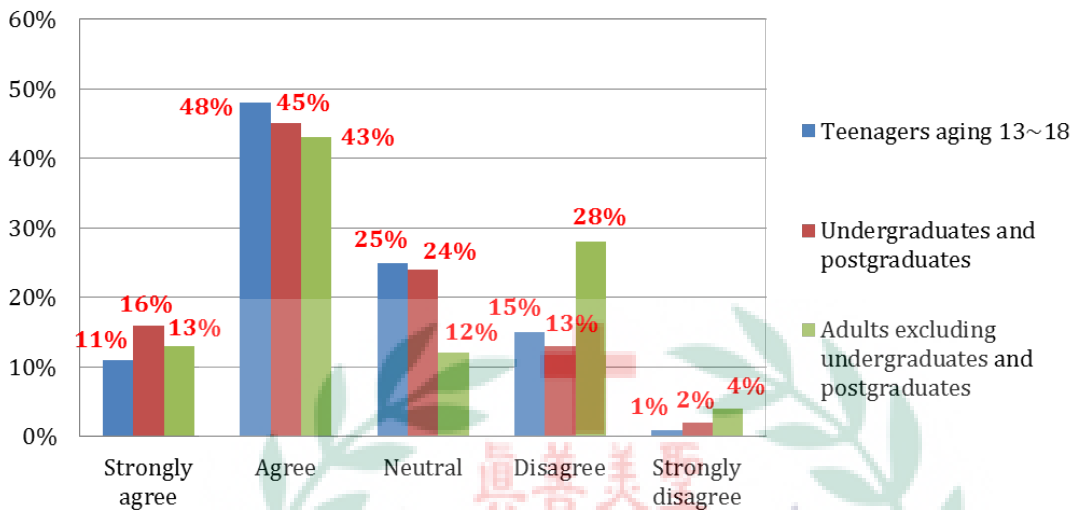
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	3 (3%)	5 (9%)	15 (9%)
Agree	37 (32%)	22 (40%)	74 (46%)
Neutral	38 (33%)	12 (22%)	31 (19%)
Disagree	33 (29%)	15 (27%)	36 (22%)
Strongly Disagree	3 (3%)	1 (2%)	7 (4%)
Total	114 (100%)	55 (100%)	163 (100%)



10. I tend to use my smartphones when I am in public or formal places or with people whom I am not familiar with.

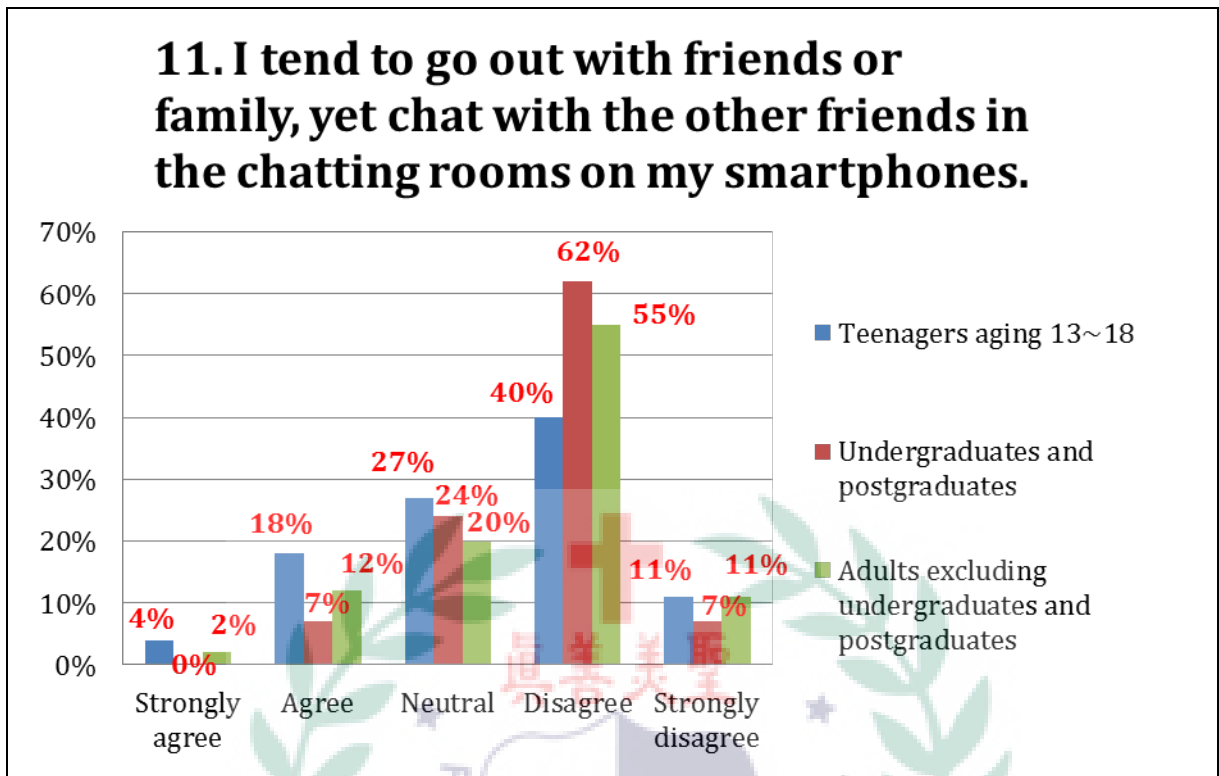
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	13 (11%)	9 (16%)	21 (13%)
Agree	55 (48%)	25 (45%)	71 (43%)
Neutral	28 (25%)	13 (24%)	19 (12%)
Disagree	17 (15%)	7 (13%)	45 (28%)
Strongly Disagree	1 (1%)	1 (2%)	7 (4%)
Total	114 (100%)	55 (100%)	163 (100%)

10. I tend to use my smartphones when I am in public or formal places or with people whom I am not familiar with.



11. I tend to go out with friends or family, yet chat with the other friends in the chatting rooms on my smartphones.

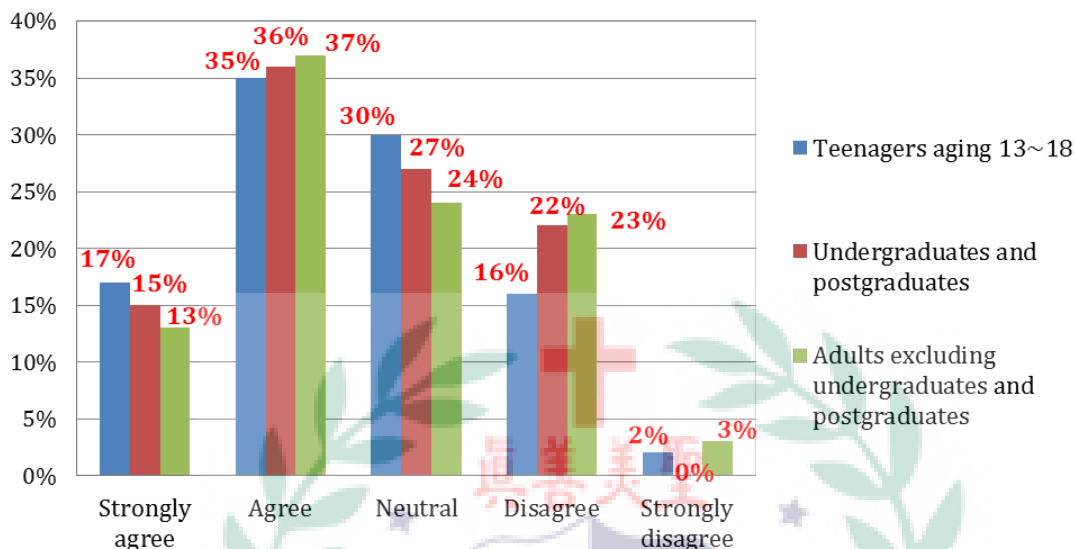
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	4 (4%)	0 (0%)	4 (2%)
Agree	20 (18%)	4 (7%)	19 (12%)
Neutral	31 (27%)	13 (24%)	32 (20%)
Disagree	46 (40%)	34 (62%)	90 (55%)
Strongly Disagree	13 (11%)	4 (7%)	18 (11%)
Total	114 (100%)	55 (100%)	163 (100%)



12. Before I have my own smartphones, I feel less awkward for doing nothing when I am in the public transportation or places.

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	19 (17%)	8 (15%)	21 (13%)
Agree	40 (35%)	20 (36%)	60 (37%)
Neutral	34 (30%)	15 (27%)	39 (24%)
Disagree	18 (16%)	12 (22%)	38 (23%)
Strongly Disagree	3 (2%)	0 (0%)	5 (3%)
Total	114 (100%)	55 (100%)	163 (100%)

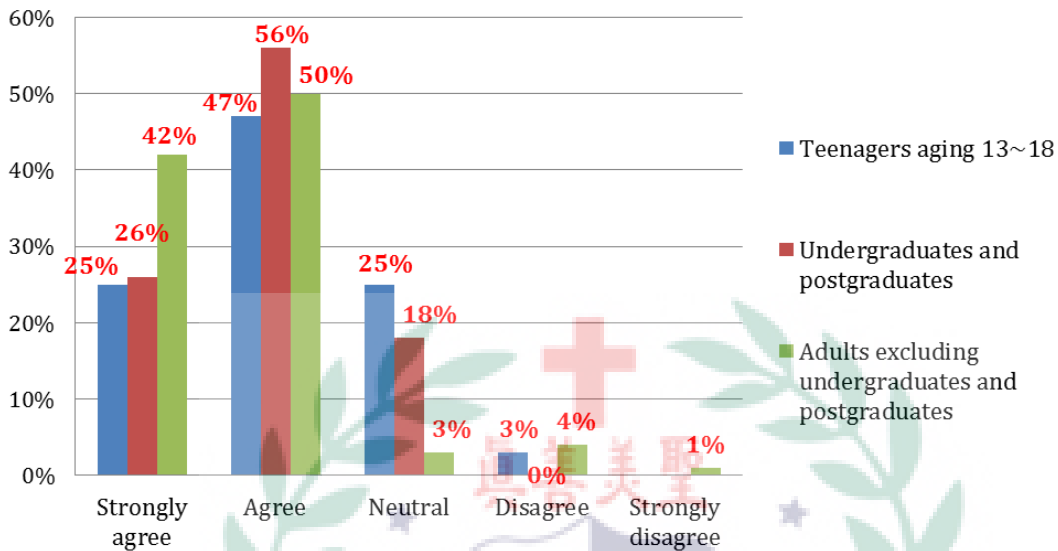
12. Before I have my own smartphones, I feel less awkward for doing nothing when I am in the public transportation or places.



13. I think it is impolite for people to mostly look down on their smartphones and speak less when going out or dining with them.

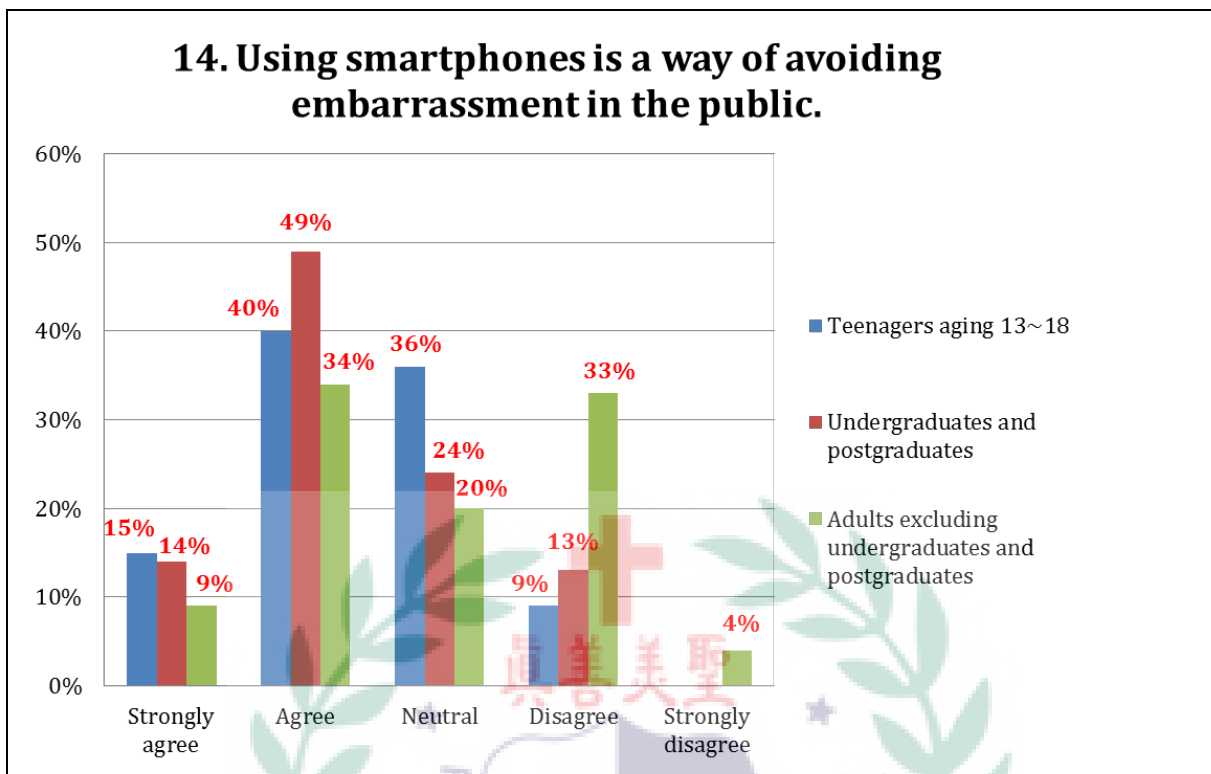
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	29 (25%)	14 (26%)	69 (42%)
Agree	54 (47%)	31 (56%)	81 (50%)
Neutral	28 (25%)	10 (18%)	5 (3%)
Disagree	3 (3%)	0 (0%)	6 (4%)
Strongly Disagree	0 (0%)	0 (0%)	2 (1%)
Total	114 (100%)	55 (100%)	163 (100%)

13. I think it is impolite for people to mostly look down on their smartphones and speak less when going out or dining with them.



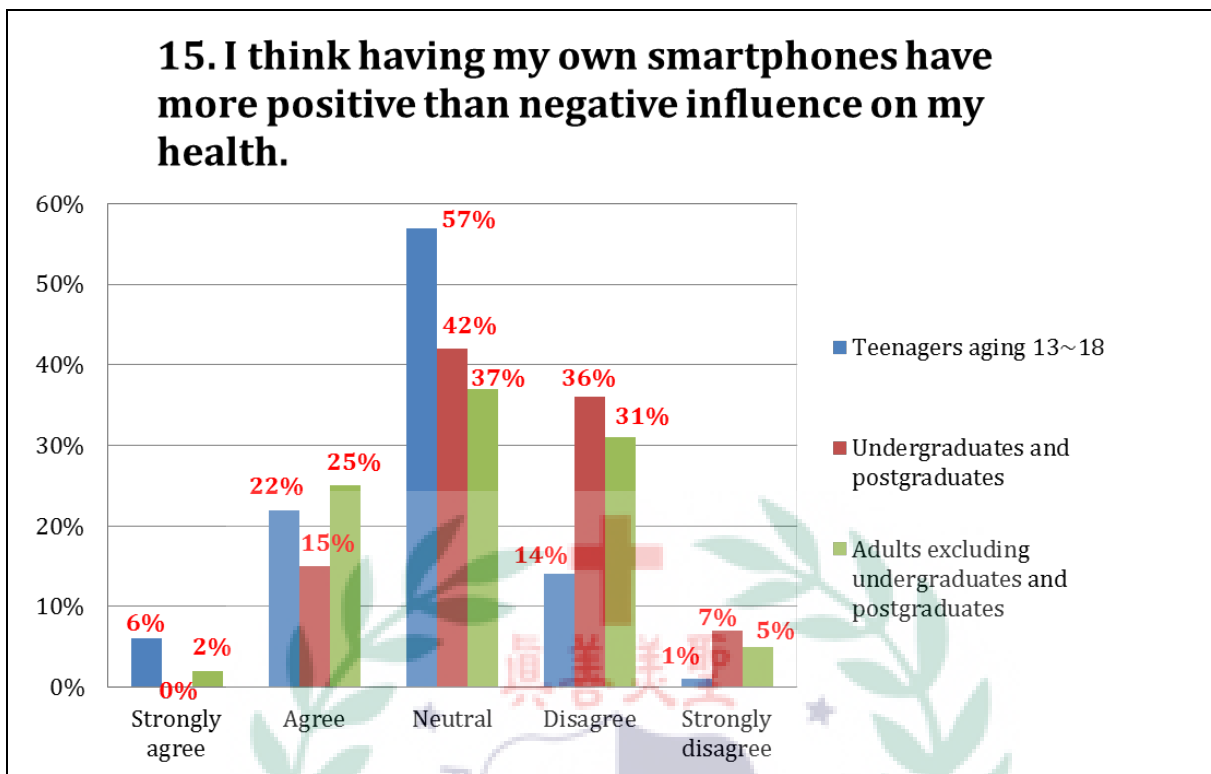
14. Using smartphones is a way of avoiding embarrassment in the public.

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	17 (15%)	8 (14%)	15 (9%)
Agree	46 (40%)	27 (49%)	56 (34%)
Neutral	41 (36%)	13 (24%)	32 (20%)
Disagree	10 (9%)	7 (13%)	54 (33%)
Strongly Disagree	0 (0%)	0 (0%)	6 (4%)
Total	114 (100%)	55 (100%)	163 (100%)



15. I think having my own smartphones have more positive than negative influence on my health.

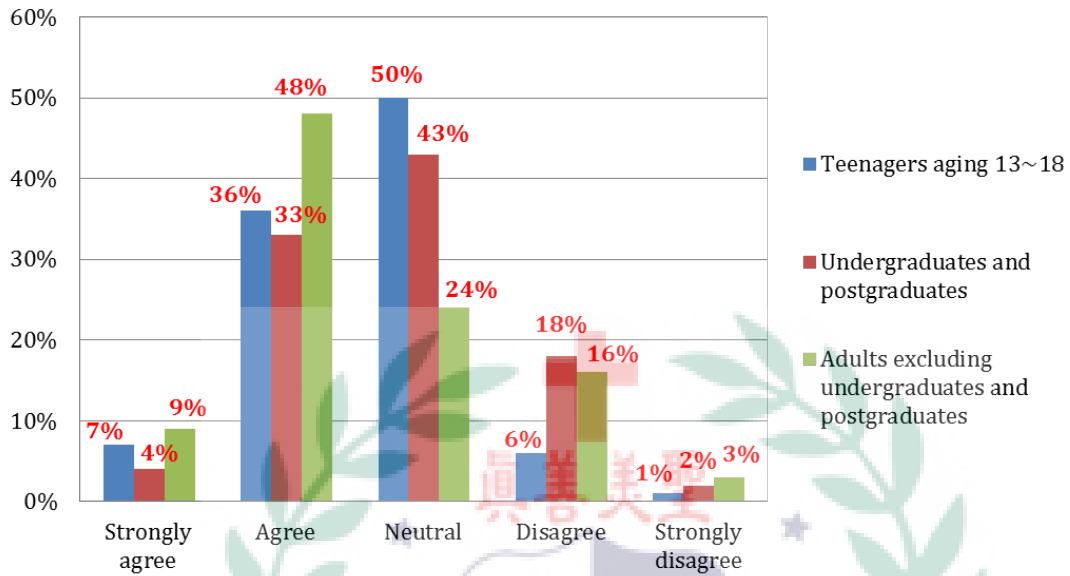
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	7 (6%)	0 (0%)	4 (2%)
Agree	25 (22%)	8 (15%)	40 (25%)
Neutral	65 (57%)	23 (42%)	61 (37%)
Disagree	16 (14%)	20 (36%)	50 (31%)
Strongly Disagree	1 (1%)	4 (7%)	8 (5%)
Total	114 (100%)	55 (100%)	163 (100%)



16. I think having my own smartphones have more positive than negative influence on my social interactions with others.

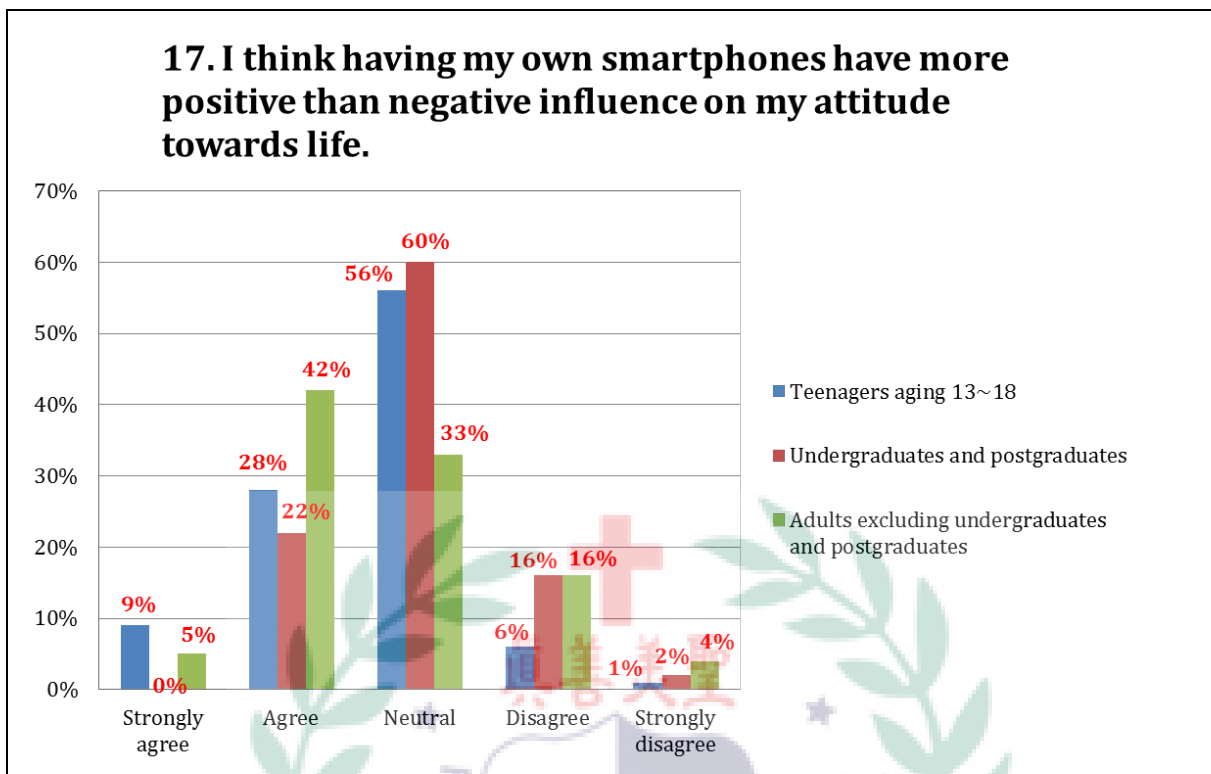
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	8 (7%)	2 (4%)	15 (9%)
Agree	41 (36%)	18 (33%)	78 (48%)
Neutral	57 (50%)	24 (43%)	39 (24%)
Disagree	7 (6%)	10 (18%)	26 (16%)
Strongly Disagree	1 (1%)	1 (2%)	5 (3%)
Total	114 (100%)	55 (100%)	163 (100%)

16. I think having my own smartphones have more positive than negative influence on my social interactions with others.



17. I think having my own smartphones have more positive than negative influence on my attitude towards life.

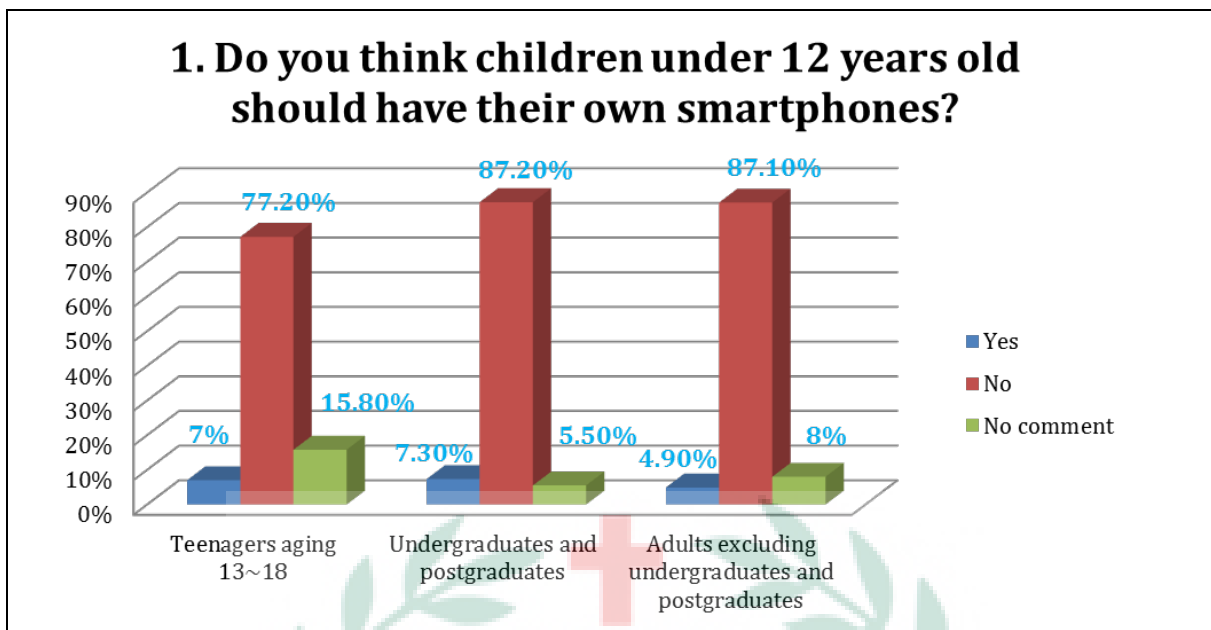
	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Strongly agree	10 (9%)	0 (0%)	8 (5%)
Agree	32 (28%)	12 (22%)	68 (42%)
Neutral	64 (56%)	33 (60%)	54 (33%)
Disagree	7 (6%)	9 (16%)	27 (16%)
Strongly Disagree	1 (1%)	1 (2%)	6 (4%)
Total	114 (100%)	55 (100%)	163 (100%)



Part IV. Personal Opinions towards Children Owning Smartphones

1. Do you think children under 12 years old should have their own smartphones?

	Teenagers aging 13~18	Undergraduates and postgraduates	Adults excluding undergraduates and postgraduates
Yes	8 (7%)	4 (7.30%)	8 (4.90%)
No	88 (77.20%)	48 (87.20%)	142 (87.10%)
No comment	18 (15.80%)	3 (5.50%)	13 (8%)
Total	114 (100%)	55 (100%)	163 (100%)



2. Please explain the reasons why.

Reasons	No.	Yes.
Teenagers aging 13~18	<ol style="list-style-type: none"> Smartphones have negative influence on children's eyesight. Children are too young to control themselves in using smartphones. Children are too young to have their own smartphones. Children will become less concentrated in terms of learning. 	<ol style="list-style-type: none"> If children want their own smartphones, just give them their own ones. I can have my own smartphone at a young age, so why my children cannot do so? As long as their parents agree, children can have their own smartphones.
	<ol style="list-style-type: none"> Smartphones have negative influence on children's eyesight. Children are too young to have their own smartphones. 	<ol style="list-style-type: none"> It is convenient for parents to keep track of their children through smartphones.

Undergraduates and postgraduates	<ol style="list-style-type: none"> 3. Children need to learn how to interact with others more. 4. Children are easily addicted to smartphones. 5. Smartphones will influence children's attention. 	<ol style="list-style-type: none"> 2. It depends on different cases. 3. Letting children have their own smartphones is an act of showing respect to them.
Adults excluding undergraduates and postgraduates	<ol style="list-style-type: none"> 1. Children are too young to control themselves in using smartphones. 2. Children are easily addicted to smartphones. 3. Smartphones have negative influence on children's eyesight. 4. Children are too young to have their own smartphones. 5. Smartphones will influence children's health. 6. Smartphones will influence children's social interactions with others. 	<ol style="list-style-type: none"> 1. It is convenient for parents to keep track of their children through smartphones. 2. Children can have their own smartphones, but they should not use them too frequently. 3. Children should have their own smartphones and also be taught of the bad consequences of overly using smartphones.