

## Usage Behaviours of Mobile Phone Among Teenagers and its Implications to Teenagers in Kuala Lumpur, Malaysia

**Yann Ling Goh\***

Department of Mathematical and Actuarial Sciences, Lee Kong Chian Faculty of Engineering and Science, Universiti Tunku Abdul Rahman, Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor, Malaysia

**Yeh Huann Goh**

Department of Mechanical Engineering, Faculty of Engineering, Kolej Universiti Tunku Abdul Rahman, Jalan Genting Kelang, Setapak, 53300 Kuala Lumpur, Malaysia

**Mei Peng Low**

Department of Economics, Faculty of Accountancy and Management, Universiti Tunku Abdul Rahman, Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor, Malaysia

**Raymond Ling Leh Bin**

Department of Accountancy, Faculty of Accountancy and Management, Universiti Tunku Abdul Rahman, Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor, Malaysia

### Abstract

The mobile phone has become a regular feature in the Malaysian society. Besides making calls, mobile phones are used to send text messages, listen to music, play games, take photographs, surf the net, etc. For teenagers in particular, the mobile phone is an indispensable thing that must be brought along all the time. From the point of view of parents, mobile phone is a means for them to be able to keep in touch with their children when their children move away from their parental home. But, schools and educational settings reported that mobile phones have caused lots of discipline issues in schools and mobile phones should be banned in schools. A survey was conducted to explore the usage behaviours of mobile phone among teenagers and its implications to teenagers in Kuala Lumpur, Malaysia. The data were collected through survey questionnaires filled by 512 teenagers, aged between 13-18 years old in Kuala Lumpur, Malaysia. The findings revealed that misuse of mobile phone will lead to negative consequences to teenagers. The study recommends a provision of guidance and counselling services to teenagers on the use of mobile phone.

**Keywords:** Misuse; Videoing; Gaming; Entertainment; Text messages.



CC BY: [Creative Commons Attribution License 4.0](https://creativecommons.org/licenses/by/4.0/)

Mobile phone plays an important role in human life nowadays. It is owned by all age of groups. It directly or indirectly affects our everyday life (Chatterjee, 2014); (Liang and Hwang, 2016); (Naeem, 2014). Galván *et al.* (2013) claimed that with the increased presence and personal use of mobile phones, there is a greater likelihood that an individual will be frequently impacted by mobile phones because either they or someone around them is using a mobile phone. Lenhart (2010) mentioned that 67% of men and 64% of women have slept with their mobile phones right next to their beds. Duggan (2015) pointed out that people - particularly young people - are continually finding and adapting new ways of communicating electronically to fit their needs.

Most of Teenagers nowadays have mobile phones. We often see teens talking, texting, or gaming on their phones. When the teens see their friends have the latest version of mobile phone, teens will always demanding their parents for a new one. Moreover, some teens even steal their friends' phones in school if their parents do not fulfill their demand.

Some teenagers attracted and addicted to the features of the mobile phone. They spend long hours for just gaming or watching movies by YouTube. The addiction to play games or watching movies until midnight will result in lack of sleep. Findings from studies suggest that inadequate sleep quality and quantity are linked to sleepiness, inattention, and probably other cognitive and behavioral deficits that impact daytime functioning, with potential implications for long-term development (Beebe, 2011). Most of the educational institutes commented that mobile phone has become a gadget on which most of the students commit their valuable learning time. When mobile phone is wrongly used, it could result to negative consequences that affect the attainment of the required educational goals.

Hand phone Users Survey from 2009-2014 was conducted by Malaysian Communications And Multimedia Commission (2015). It is reported that pre-teens and teens (Users aged up to 19 years old) contributed for around 15% of the hand phone users in Malaysia. The percentage of hand phone users according to age classes in the report was shown in Table 1.

Table-1. Percentage of hand phone users

Age classes	2009	2010	2011	2012	2013	2014
Below 15	2.3%	3.4%	1.9%	1.8%	1.7%	1.8%
15-19	12.4%	10.9%	10.4%	11.4%	13%	10.7%
20-49	73.5%	72.4%	74.3%	73.3%	72.4	73.1%
50+	11.8%	13.3%	13.4%	13.5%	12.9%	14.4%

The purpose of this paper is to study the usage behaviours of mobile phone by teenagers ranging from calling, SMS, videoing, music playing, etc in Kuala Lumpur, Malaysia. Furthermore, the implications of mobile phone to teenagers is also being investigated.

## 2. Literature Review

In a study for Jones (2014), observations and a survey of students on Elon campus showed that Elon is not an exception to the phenomenon that cell phone addiction is affecting many young adults. People are becoming more aware of their own personal habits and behaviors regarding interaction with their devices. Similarly, Amin and Rashed (2014) showed that students mostly use cell phone for un-educational activities. According to teachers and parents, due to the use of cell phone, children are losing focus on their studies and parents are decreasing their parental control on their children. In 2015, Lepp, Barkley, & Karpinski have assessed the relationship between cell phone use and actual college grade point average (GPA) after controlling for known predictors.

A study for Mohammed *et al.* (2017) showed that face-to-face communication with family members and friends has reduced as a result of the use of technology. People become more reliant on communicating with friends and family through technology. Most of them felt the quality of their conversations degraded in the presence of technology. Also, they felt bothered when family and friends used technology while spending time together.

Goswami and Singh (2016) investigated the impact of mobile phone on adolescent's life. There are several reviews addressing mobile phone addiction symptoms, negative effect of mobile phone addiction on adolescents, the role of mobile phone addiction on adolescent's mental and physical health, etc.

Shahyad *et al.* (2011) indicated that there is gender-related difference between motivations behind S.M.S messages sent by boys and girls. Girls are mostly motivated by being informed and feeling secure as a result of the information received. Boys on the other hand are mostly motivated by avoid of face-to-face relationship.

Moreover, Haug *et al.* (2015) investigated indicators of smartphone use, smartphone addiction, and their associations with demographic and health behaviour-related variables in young people. In addition, Ak *et al.* (2016) investigated the effects of excessive mobile phone use on the human Health. The findings concluded that by usage of the mobile phones, three diseases such as the brain tumor, male infertility and ear hearing function can be affected on human health.

## 3. Methodology/Materials

In order to study the usage behaviours of mobile phone by teenagers, a questionnaire was developed consisting of 20 issues to be measured from the teenagers' point of view. The questionnaires were distributed to 512 teenagers, aged between 13 – 18 years old in Kuala Lumpur, Malaysia. One parent and one teenage child participated in each survey. The data about parenting behaviour is parenting behaviour for the specific teen who had completed the survey. In current study, secondary school teachers told their experiences by the help of questionnaire.

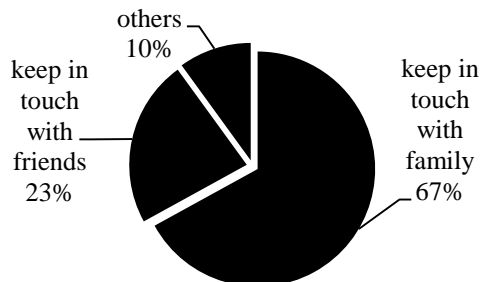
Mobile phone use was assessed concerning the followings: (1) how frequently mobile phone use by 'make & receive calls', 'send & receive SMS', 'record or play videos', 'play music', 'browse webpage', 'take pictures', 'play games' to which teenagers could respond by choosing 'daily', '1-3 times per week', '4-6 times per week', 'during weekends', 'monthly', or 'never'; (2) duration of mobile phone use each time for gaming and music playing, to which teenagers could respond by choosing 'less than 1 hour', '1-2 hours', '2-3 hours', or 'more than 3 hours'; (3) the main purpose to have mobile phone, number of SMS sent and received per day, monthly bills, etc to which teenagers provided the estimated answer.

## 4. Results and Findings

According to Table 2, the most common usage of mobile phone by teenagers are to make phone call, SMS and webpage browsing. 95% of teenagers agree that by owning a mobile phone, they can reach their parents no matter where they are. Using mobile phone for calling is critically important for them especially when they move away from their homes and is really convenient for emergencies. Figure 1 reveals that main purpose for them to have a mobile phone is to keep in touch with family and the second is to keep in touch with friends.

**Table-2.** Usage Patterns of Mobile Phone by Teenagers

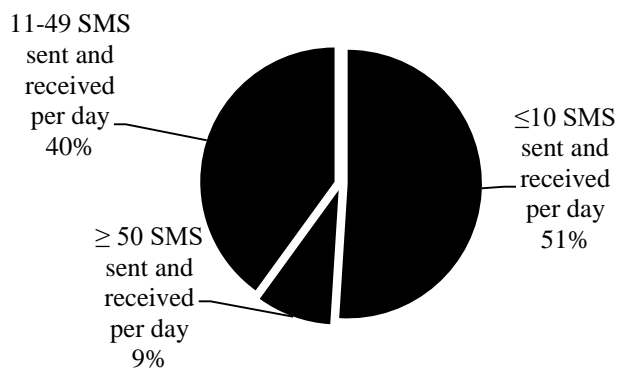
Usage	Daily	1-3 times per week	4-6 times per week	During weekends	Monthly	Never
Make & receive calls	53.7%	19.5%	11.9%	2%	2.9%	10%
Send & receive SMS	58.6%	11.9%	19.9%	2.5%	2.5%	4.5%
Record or play videos	31.4%	28.9%	10%	10%	12.7%	7%
Play music	31.6%	26.8%	9.8%	9.8%	14.8%	7.2%
Browse webpage	64.1%	4.5%	4.5%	7.4%	8.4%	11.1%
Take pictures	22.1%	24%	15.6%	5.1%	19.5%	13.7%
Play games	34.6%	19.5%	14.5%	11.9%	4.5%	15%

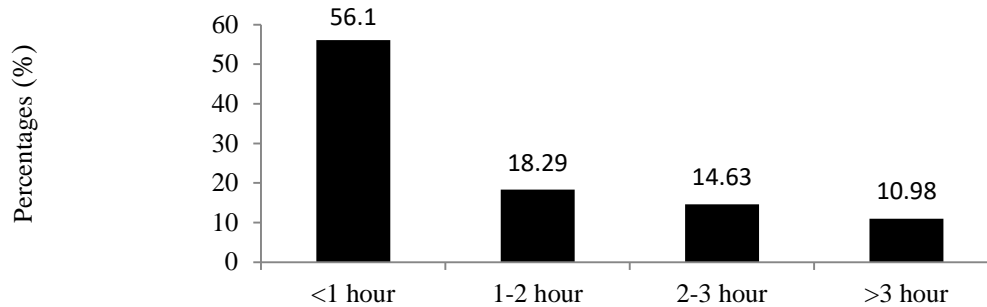
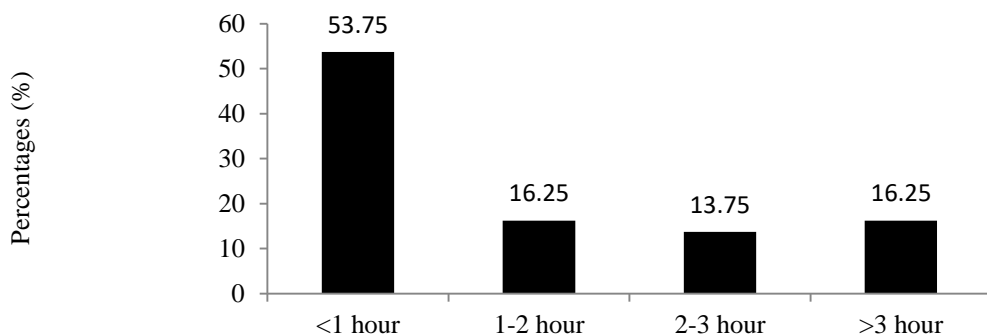
**Figure-1.** Main purpose to have mobile phone

Browsing webpage is another major type of mobile phone usage by teenagers. Table 2 shows that 64.1% of the teenagers have used mobile phone to browse webpage daily. This number indicates that web browsing by using mobile phone is common among teenagers nowadays. Mostly, teenagers use Facebook website to communicate with their friends, discussing assignments provided by teachers, sharing photos, etc. Teenagers tend to use You Tube website to search for latest information such as political situations and social problems. They also use You Tube website to search for latest movies and songs.

Table 2 reveals that 95.5% of teens who own a mobile phone use text messaging and more than half of teens (58.6%) texting daily. Figure 2 shows that about one-tenth of teens (9%) send and receive 50 or more text messages a day, or 1500 texts a month, and 40% of teens send and receive between 10-50 texts a day or 300-1500 texts a month. But, 51% of teens send and receive just 0-10 texts a day or 0-300 texts a month. 80% of teens say they are more likely to use their mobile phones to text their parents and friends than to talk to them by mobile phone. Teens agree that they make and receive far fewer phone calls than text messages. They say normally they make or receive for not more than 5 calls a day.

The usage of mobile phone by teenagers is extended to entertainment such as music playing, videoing, gaming, etc. The statistics shows that approximately 31.6% of teenagers play music daily while 31.4% of teenagers record or play videos daily. Figure 3 shows that 56.1% of the teenagers play music each time for less than 1 hour whereas about 11% of them play more than 3 hours each time. For those play music for more than 3 hours each time reported that with the use of earpiece, songs are being listened in the school and at home all the time. Teenagers play different games in the mobile phone namely Candy Crush Saga, Angry Bird, Tower of Saviour, Dark Avenger, Jelly Dash, Clash of Clans, Plant Vs Zombie, etc. Analysis shows that 34.6% of teenagers gaming daily and 16.25% of them spend more than 3 hours in gaming each time.

**Figure-2.** Number of SMS sent and received per day by teenagers

**Figure 3.** Length of time teenagers play music on mobile phone each time**Figure-4.** Length of time teenagers play games on mobile phone each time

Griffiths (2000) mentioned that mobile phone is no more a luxury item among teenagers. Of those who estimated their monthly bills, 31% say that they spend less than RM 10. 32.6% say that they spend RM 10 to RM 30 whereas 29.7% say that they spend between RM 30 and RM 50. The remaining 6.7% say that they spend at least RM 50 while the maximum reported bill is RM 120.

Some teenagers have the habit of keeping their mobile phones on during classes and studies. They are distracted by the incoming calls and SMS during school hours and self-studying. The ring tones and vibrations also distract other students and teacher while classes are on, make both teaching and learning difficult.

Besides, some teenagers spend hourly to download and store music, videos and games. They commit their time and energies to the various applications in the mobile phone like taking photographs, sound recording, etc. They enjoy the various functions in the mobile phone until forgetting that academic work should be the priority. They even discuss content of movies or games with their classmates in school.

This is an indication that mobile phones have negative influence to teenagers' academic work. After they had spent a few hours on gaming or videoing, they become tired and not able to concentrate to do self revision or finishing their homework. The addiction on playing games makes teenagers spend a lot of time by just looking at various forms of images per second. This is because the games challenge teenagers' minds and abilities while playing. Games forces teenagers not to give up to get as more points as possible. Some of the teens even play video games until ignoring sleep time and as a result, they are difficult to wake up early in the morning to class and can't pay full attention when the teachers are teaching (Moore *et al.*, 2009). This would have been the cause of failure of some teenagers in their studies. But, from the point of view of teenagers, out of 512 teenagers, only 153 teenagers agree that mobile phone will distracting their attention from learning and affect their academic performance.

Most of the schools treat mobile phones as something to be barred from school campus. However, 75% of phone-owning teens bring their phones to school daily although mobile phones are completely forbidden in their school. 61% of phone-owning teens have sent text messages and 15% have made or received phone calls during class time although mobile phones had been banned in school.

Some school teachers claimed that mobile phones should be totally prohibited during school hours, because they would cause distractions to students and teachers. According to their views, teenagers tend to pay more attention to their mobile phones than lessons taught in class. Some teenagers will try to texting or gaming under desks when classes are on. Some teenagers even use mobile phone for cheating in tests. Besides, school teachers also say that mobile phone increases school crime, as teenagers often steal phones at school.

Some parents control over their children's mobile phone usage. Some parents will limiting their kids use, checking contents inside their kids' mobile phone and limit their monthly bills. The survey reveals that 10% of parents look at the messages of their children's mobile phone. 28% of parents have taken away their children's phone as punishment for not being doing well in the exam. 73% of parents limit the amount of money their children spent monthly on mobile phone. 12% of parents only allow their children to surf the internet via mobile phone during weekends and 18% of parents only allow their children gaming via mobile phone during school holidays.

However, these activities by parents do not seem to impact patterns of mobile phone use by teens. Teens keeps on downloading videos and gaming during school days. From the survey, 80% of phone-owning teens say that phone helps them to entertain themselves when they are bored. For example, teens can just use their mobile phones to listen to songs while waiting for a bus to go back from school.

## 5. Conclusion

From the survey conducted, we know that the major reason parents brought a mobile phone for their children is for safety. Mobile phone enables teens to be always keep in touch with their parents no matter where they are. However, there are negative aspects of teenagers mobile phone use because most of the teens do not use their mobile phones wisely. They spend lots of time in texting, gaming, videoing, etc until neglecting their academic work.

In many schools, mobile phones are forbidden because it is reported that phones constitute in negative educational outcomes. However, banning mobile phones lead to conflicts with pupils and parents as parents may assert that their children need to bring their mobile phones to school in case of an emergency. Although school can establish some rules on the use of mobile phone, but it is hard to implement as teens do not always follow the rules, for example, texting during classes although it is not allowed.

It is recommended that parents to educate their children about how to use mobile phone safely and responsibly, the consequences if they do not use mobile phone wisely. Parents can also consider to set rules and regulations to their children on the usage of mobile phone, for example, stop texting at midnight instead of sleeping. If their children do not comply with the rules, parents can reconsider to let their children to have only the most basic mobile phone without texting capability and internet access.

It is also recommended that teachers and school authorities to discourage teenagers to use mobile phone when the class is on. The rules and regulations against the use of mobile phone during class should be well stated with guidelines for its enforcement. The school counselling unit should guide teenagers on the use of mobile phone in the school campus. The counselling unit should also remind teenagers that disciplinary actions will be taken against those who are texting in the class, cheating in exams, taking inappropriate photographs, sending harassing messages, etc.

Besides, teenagers must understand that mobile phone as a communication tool is very useful for multiple purposes such as calling, sending or recording information. So, they must use the applications provided in mobile phone wisely and not misuse it.

## References

- Ak, S., Rsa, L., Gz, M. M. K. and Sk, A. H. M. (2016). Impact of excessive mobile phone usage on human. *Journal of Computer Science & Systems Biology*, 9(6): 173–77.
- Amin, S. and Rashed, A. (2014). Effect of using habits of cell phone on the study of the students, A case study on parents and teachers of sargodha city. *Asian Journal of Empirical Research Journal*, 4(4): 254–62.
- Beebe, D. (2011). Cognitive, behavioral, and functional consequences of inadequate sleep in children and adolescents. *Pediatric Clinics of North America*, 58(3): 649–65.
- Chatterjee, S. (2014). A sociological outlook of mobile phone use in society. *International Journal Of Interdisciplinary And Multidisciplinary Studies*, 1(6): 55–63.
- Duggan, M. (2015). Mobile messaging and social media
- Galván, V. V., Vessal, R. S. and Golley, M. T. (2013). The Effects of Cell Phone Conversations on the Attention and Memory of Bystanders. *PLoS ONE*, 8(3): 1–10.
- Goswami, V. and Singh, D. R. (2016). Impact of mobile phone addiction on adolescent's life, A literature review. *International Journal of Home Science*, 2(1): 69-74.
- Griffiths, M. D. (2000). Does internet and computer addiction exist? Some case study evidence. *CyberPsychology & Behavior*, 3(2): 211–18.
- Haug, S., Castro, R. P., Kwon, M., Filler, A., Kowatsch, T. and Schaub, M. P. (2015). Smartphone use and smartphone addiction among young people in Switzerland. *Journal of Behavioral Addictions*, 4(4): 299–307.
- Jones, T. (2014). Students' cell phone addiction and their opinions. *The Elon Journal of Undergraduate Research in Communications*, 5(1): 74–80.
- Lenhart, A. (2010). *Cell phones and american adults, They make just as many calls, but text less often than teens*. Pew Research Center.
- Liang, H. W. and Hwang, Y. H. (2016). Mobile phone use behaviors and postures on public transportation systems. *PLoS ONE*, 11(2): 1–12.
- Malaysian Communications And Multimedia Commission (2015). Hand phone users survey. *Malaysian Communication and Multimedia Commission*:
- Mohammed, M., Naser, A. and Samy, S. (2017). Effects of mobile technology on human relationships. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(5): 110–25.
- Moore, M., Kirchner, H. L., Drotar, D., Johnson, N., Rosen, C., Ancoli-Israel, S. and Redline, S. (2009). Relationships among sleepiness, sleep time, and psychological functioning in adolescents. *Journal of Pediatric Psychology*, 34(10): 1175–83.
- Naeem, Z. (2014). Health risks associated with mobile phones use. *International Journal of Health Sciences*, 8(4): 5-6.
- Shahyad, S., Pakdaman, S., Hiedary, M., Miri, M., Asadi, M., Nasri, A. and Alipour, A. S. (2011). A comparison of motivation, frequency and content of s.M.S. Messages sent in boys and girls high school student. *Procedia - Social and Behavioral Sciences*, 15: 895–98.