



**UNIVERSITY OF THE PHILIPPINES
OPEN UNIVERSITY**

MASTER OF DEVELOPMENT COMMUNICATION PROGRAM

Sarah Jane A. Biton

**Online Privacy Management as Perceived and Practiced in Facebook by the
Selected Adolescents in Quezon City**

Thesis Adviser:
(Chair) Bandalaria, Melinda dP., PhD
Faculty of Information and Communication Studies

Date of Submission
7 December 2021

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*Sarah Jane A. Biton
December 7, 2021*

This Thesis titled Online Privacy Management as Perceived and Practiced in Facebook by the Selected Adolescents in Quezon City is hereby accepted by the Faculty of Information and Communication Studies, U.P. Open University, in partial fulfillment of the requirements for the degree Master of Development Communication (MDC).

Bandalaria, Melinda dP., PhD
Chair, Thesis Committee

7/7/2022

Date

Flor, Benjamina G., PhD
Member, Thesis Committee

7/24/2022

Date

Jamias, Serlie B., PhD
Member, Thesis Committee

7/2/2022

Date

*Dr. Alexander G. Flor
Dean
Faculty of Information and Communication Studies*

Date

BIOGRAPHICAL SKETCH

Sarah Jane Biton was born and raised in a rural village in Bicol Region, Philippines, the place known for the majestic Mayon Volcano. She's been working in non-profit and non-governmental organizations for the past eight (8) years, managing international development projects for the promotion of sexual and reproductive health and rights of the Filipinos. One of the focuses of her work is adolescent health, which paved her interest to conduct research on this topic.

ACKNOWLEDGEMENT

I am genuinely grateful to my friends and family members who helped me make this research possible – to Alvin for all moral support, Franco for helping with the Statistics, and my Auntie Sonia for helping with the respondents. I also would like to thank the School Principal and teachers of Commonwealth Elementary School and Commonwealth High School for entertaining my request to conduct a survey among their students.

Dedicated to:

My Mama and Papa

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Chapter One INTRODUCTION

Background of the Study

How many of the people you know have access to the internet? I suppose you can easily name a few. It is not surprising, as 6 out of 10 humans are online (Llamas, 2020). Nowadays, it is so hard to imagine a world without social media, especially for the younger generation. Social media is “the term often used to refer to new forms of media that involve interactive participation” (Manning, 2014). It uses mobile or web-based technologies, where individuals “share, co-create, discuss, and modify user-generated content” (Kietzmann et al., 2011). They have become the space for communicating with friends and loved ones, expressing oneself, getting news and information, being updated with the recent events of our childhood friends or family members, and even for selling or buying different products. With these features, it is foreseeable that many people are taking advantage of social media. As of October 2020, more than half of the worldwide population (4.14 billion) are active social media users (Kemp, 2020). They are 88.84% of the total internet users (4.66 billion), and they spend an average of “2 hours and 29 minutes per day using social media” (Kemp, 2020). It is about 15.52% of our waking hours.

These worldwide data are not far from what is happening in the Philippines, wherein, as of January 2020, 67% of the population, or 74 million people, are active social media users (Kemp, 2020). This high number of active social media users is associated with the younger population. Almost forty-two percent (42%) of the active social media users are young people ages 13-24 years old, who spend an average of 3 hours and 53 minutes on social media; 97% of them use their mobile phones to access their social media accounts. Furthermore, Facebook is the Philippines’ most commonly used social media platform (Kemp, 2020).

Facebook is “a social media and social networking service” (Wikipedia contributors, 2021) based in Menlo Park, California. Through this social media, users can upload their photos or videos, post their status, expand their network by adding friends, access groups that share the same interest, or browse different items and services via Marketplace. Facebook also developed its messaging app – Facebook Messenger. Through the app, “[u]sers can send messages and exchange photos, videos, stickers, audio, and files, as well as react to other users’ messages and interact with bots. The service also supports voice and video calling” (Wikipedia contributors, 2021a).

Indeed, Facebook is a virtual meeting place of different people who may choose to use their real identity or hide behind a made-up one. Some of these accounts are fake and are created for fraudulent reasons. Kemp (2020) stated that one internet user has “an average of 8.3 social media accounts,” and in the Philippines, there are likely “9.9 social media accounts per internet user”. Hence, there are more Facebook users in some cities in the Philippines than the actual population (Tantuco, 2018). Though “using social media can enhance communication, social connection and even technical skills of young people” (O’Keeffe and Clarke-Pearson, 2011), these social media platforms, aside from causing negative impacts on one’s well-being, are not safe and secure for young people, especially adolescents.

Adolescents are “any person between the ages of 10 and 19” (World Health Organization, 2018); it is the period of transition from childhood to adulthood and is defined by “transition from parental dependence to relative autonomy” (Heyes & Hiu, n.d.). With the growth of online learning during the coronavirus disease 2019 (COVID-19) pandemic, adolescents spend more time online. In the Philippines, it is observed that social media, especially Facebook, are being used to coordinate online classes. Students have chat groups or Facebook groups where they talk to their classmates. Though most social networks established a minimum age of 13 for the use of their services, many 12-year-olds and under are hidden users of these social networks. According to Consumer Reports (2011), 7.5 million Facebook users are under the age of 13. A study from Ofcom suggests that half of the children aged 11 and 12 have a social media profile (BBC News, 2017). With that, their safety and privacy while navigating Facebook have been a significant apprehension. Are they literate enough when it comes to online privacy?

Indeed, the online privacy literacy of adolescents is a rising concern, especially in the Philippines. According to Givens (2015), “privacy literacy is one’s level of understanding and awareness on how information is tracked and used in online environments and how that information can retain or lose its private nature.” It is about understanding what may happen to personal information online and active participation in this information (Wissinger, 2017). According to Rotman (2009), privacy literate users should be educated to distinguish between different facets of personal information. They should also be familiar with their profile setting and information that should not be disclosed, understand the limitations of online anonymity, and be aware of the threats to take precautions against overexposure. Moreover, online privacy literacy reflects on the practices of the user in managing their privacy online; and to achieve this, “critical thinking is important when navigating the online environment” (Mackey and Jacobson, 2014).

However, due to the nature of the adolescent brain, being logical is a challenge. Commonly, adolescents have exaggerated feelings, and they let their emotions carry them away. They usually behave in an impulsive, irrational, and dangerous way, and “their actions are guided more by the emotional and reactive amygdala, and less by the thoughtful, logical frontal cortex” (*Teen Brain: Behavior, Problem Solving, and Decision Making. Facts for Families*, 2016). As a result, they are more likely to engage in dangerous behavior, making them more vulnerable to online privacy risks.

With this, understanding their online privacy-related practices is crucial. Knowing their perception about the online privacy risks and how they manage their online privacy on Facebook is beneficial to ensure their safety. There have been studies on this already, but they are primarily Western (He et al., 2010; Deters & Mehl, 2013; Fiester, 2016; Barth & de Jong, 2017; Christensen, 2018; Debatin et al., 2019); there are very few studies done in Asia (Kusyanti et al., 2018; Carter, 2020); and it is an emerging study area in the Philippines. So, I would like to add to this body of knowledge by conducting a study about how online privacy management is being practiced in Facebook, the most common social media platform in the Philippines, and what are the privacy risks perception of the selected adolescents studying in Quezon City, Metro Manila – the most populous city the Philippines and one of the cities with the highest number of Facebook users (Tantuco, 2018).

The Research Problem

According to O’Keeffe and Clarke-Pearson (2011), “using social media is among the most common activities of adolescents today.” It has become the space for connecting with family and friends, expressing oneself, getting news and information, and even buying products from the online community. In the Philippines, Facebook is the most used social media platform (*Digital 2020: The Philippines – DataReportal – Global Digital Insights.*, 2020). With the growth of online learning in the country, adolescents spend more time online. Facebook is even being used to communicate with teachers and classmates. However, Facebook use is associated with a variety of online privacy risks.

Hence, what do the adolescents perceive as online privacy risks associated with Facebook use? What is the level of online privacy management, as perceived and practiced by adolescents? How do adolescents reveal and conceal private information on Facebook? How much private information do they disclose on Facebook? To whom do they share their private information? Does the age of adolescents have a relationship with their privacy risk perception and how they manage their online privacy?

The Research Objectives

General Objective. The study wants to determine the adolescents’ online privacy risks and management perception and practices in Facebook.

Specific Objectives. The following are the specific objectives of the study:

1. To identify what the adolescents perceive as online privacy risks in Facebook
2. To determine the relationship of age to Facebook privacy risk perception
3. Describe how the adolescents manage their online privacy on Facebook
4. To assess the relationship of age to online privacy management in Facebook as perceived and practiced by adolescents.
5. To find out if privacy risk perception has a relationship to online privacy management in Facebook.

Hypothesis

1. There is no significant relationship between age and the privacy risk perception of adolescents.
2. There is no significant relationship between age and online privacy management as perceived and practiced by adolescents.
3. There is no significant relationship between adolescents’ perceived and practiced online privacy management and their perception of privacy risks.

Significance of the Study

This study can serve as a baseline study about what the adolescents perceive as online privacy risks and how they manage their online privacy. The findings can be used as a reference in developing strategies, programs, campaigns, and advocacy materials on social media safety, prevention of online sexual and gender-based violence, and protection of digital or internet rights. This study can also guide the Department of Education (DepEd) and other concerned agencies in developing safeguarding protocols during the online classes. Furthermore, this study can also improve the Digital Literacy curriculum embedded in the K-12 Basic Education Curriculum for Alternative Learning System.

This study will also contribute to the existing knowledge on how to communicate and reach out to adolescents about issues related to online privacy.

Limitation of the Study

Initially, the study wanted to measure adolescents' online privacy literacy, but it is an extensive topic covering the users' knowledge, attitude, and practices. The survey questionnaire will not be able to cover its entire components. Hence, this study is limited to Facebook's privacy risk perception of adolescents and how they manage their online privacy.

Furthermore, the study has a relatively small sample size. There could be under or over-representation of the population, and results could be biased. In addition, the data gathering has been conducted through an online survey questionnaire due to restrictions brought by the coronavirus disease 2019 (COVID-19) pandemic, wherein face-to-face activities are not allowed. Respondents are less likely to be fully engaged in an online survey, and there might also be distractions while answering the survey that could affect the findings.

Operational Definition of Terminologies

Adolescents – refers to anyone who is 10 to 19 years old

Allowed Facebook users – refers to anyone who are 13-19 years old Facebook users

Boundary – a limit, border, one that divides

Boundary linkage rules of private information (also called boundary linkage of private information) – the limit of who else can know the private information

Boundary permeability rules of private information (also called boundary permeability of private information) – the limit of how much others can know about the private information

Boundary ownership rules of private information (also called boundary ownership of private information) – the limit of how much control the owner of the private information has

Boundary turbulence – a conflict related to the agreed boundary

Control – the power to direct or manage

Early Adolescents –refers to anyone who is 10 to 14 years old

Facebook – a type of social media, the most common social media platform in the Philippines

Fake accounts – a social media account with fake details

Keyboard trolls – a person who intentionally antagonizes others on social media to support a certain political party

Late Adolescents – refers to anyone who is 18 to 19 years old

Middle Adolescents – refers to anyone who is 15 to 17 years old

Older Adolescents – refers to anyone who is 15 to 19 years old

Online privacy – control over one's personal information, free from being observed or disturbed by other people or institutions

Online privacy literacy – the knowledge of online privacy, including the risks and the practices to ensure that personal data are kept private and safe

Online privacy management – the way people make decisions about and actions related to revealing and concealing private information

Online privacy risks – the possibility of harm or danger associated with online privacy

Online and social media crimes – illegal activities done online or in social media

Online class – classes that are delivered through the use of the internet via any gadgets

Perceived risks – subjective perception of what would cause harm or danger

Personal data – personally identifiable information about a person

Privacy – control over one's personal information, free from being observed or disturbed by other people or institutions

Private Information – information that should not be shared publicly

Risks – a possibility of harm or danger

Safety – free from any harm, protected from any danger or risks

Sample sections – class sections that have been randomly chosen as part of the sample

Social Media – an online platform where individuals interact, express themselves, share their opinions, photos, and videos

Underage Facebook users – refers to anyone who are 10-12 years old Facebook users

Users – they are the individuals, groups, organizations, or companies who use social media. They have social media accounts.

Young people – it refers to anyone who is 10-24 years old, and it encompasses the age range of adolescents

Younger Adolescents – refers to anyone who is 10 to 14 years old

Chapter Two

REVIEW OF RELATED LITERATURE

Imagine a world without social media. It may be possible for those born before its popularity, but it may be a different story for the younger generation. We rely on it to communicate with our loved ones, classmates, or colleagues. We also use it to consume news and stay updated with what is happening around us or what is happening with our friends' personal lives.

Indeed, social media has become popular. In October 2020, more than half of the worldwide population (4.14 billion) were active social media users already (Kemp, 2020), and most of them were on Facebook; this is a stark contrast to how it was a decade ago, "when only around two percent of the world's population used Facebook," (Serenko et al., 2021).

What is Social Media?

According to Manning (2014), social media is "the term often used to refer to new forms of media that involve interactive participation." It uses mobile or web-based technologies where individuals "share, co-create, discuss, and modify user-generated content" (Kietzmann et al., 2011). Sometimes, the term "social networking sites" (SNS) is used interchangeably with social media. Although they may sound the same, the two are different.

SNS are web-based technologies that are "all about engagement – creating relationships...building your following and connecting with your online audience" (Burke, 2013). Examples of social networking sites are dating sites like Tinder and Grindr or sites used for establishing professional connections like LinkedIn. However, these platforms do not have the broadcast component to allow their users to publish content publicly; social media sites like Facebook, YouTube, Twitter, or Instagram enable their users to create profiles, connect with other users, and share online content. Hence, SNS intends to connect people alone, while social media allows connection and engagement and enables users to broadcast what they want to share publicly.

The Evolution of Social Media

The evolution of social media and social networking sites overlaps with each other. Social media is built upon the features of social networking sites. Hence, we can assume that the SNS provided the groundwork for social media to advance. According to boyd & Ellison (2007), historically, SixDegrees.com is the first recognizable social network site. It was launched in 1997 and named after the six-degrees-of-separation idea, with a tagline, "You're only six degrees away from everyone...." It allows users to list the people they want to connect with, and they are then invited to join the site.

From 1997 onwards, several platforms that “support various combinations of profiles and publicly articulated Friends” emerged (boyd & Ellison, 2007). Some of them are AsianAvenue, BlackPlanet, and MiGente. The next wave of SNS included launching Ryze.com in 2001, Friendster in 2002, MySpace, LinkedIn, and Facebook. However, “in the end, Ryze never acquired mass popularity...LinkedIn became a powerful business service” (boyd & Ellison, 2007). Meanwhile, Friendster, “the first online social network, and a pioneer of one of today’s hottest trends on the Web,” became famous in the early 2000s (Chafkin, 2007). However, as its popularity surged, “the site encountered technical and social difficulties” that resulted in its collapse (boyd & Ellison, 2007).

Then, from 2003 onwards, many new SNS were launched. “Most took the form of profile-centric sites, trying to replicate the early success of Friendster or target specific demographic” (boyd & Ellison, 2007). Facebook, YouTube, and WhatsApp, the top three most used social platforms today (Kemp, 2020), were born in the mid to late 2000s. In 2004, Facebook was launched. While initially limited to Harvard University students, the membership was opened worldwide in the years that followed. Since then, it has eventually become the largest social network in the world. In 2005, we were introduced to YouTube, a video-sharing website; and, in 2009, WhatsApp, owned by Facebook, Inc., a messaging app that allows text and voice messages, was launched.

Role of Social Media

According to Whiting & Williams (2013), people use social media for social interaction, information seeking, passing time, entertainment, relaxation, communicatory utility, and convenience utility. However, Fiester (2016) of the University of Missouri-Columbia found that all the categories are true for the study participants except for passing the time and relaxation. Meanwhile, Wang et al. (2012) suggest that the four main reasons for social media use are emotional, cognitive, habitual, and social needs. Indeed, the Uses and Gratification Theory (UGT) proposes that people consciously consume media, which also applies to social media users. Social media users are not “passive” users. Instead, they actively choose and decide what they are going to do with their social media accounts. The gratification that they receive from using social media makes them use it more.

Hence, we can say that social media is popularly used to connect to people, spark conversations, encourage sharing of ideas or opinions, and build relationships. Furthermore, a paper that reviews social media in terms of the three critical aspects of social connectedness – social capital, sense of community, and loneliness – revealed that “using social media can increase social capital, lead to the formation of friendships and communities, and reduce loneliness” (Ryan et al., 2017).

Aside from the social connectedness aspect of social media, many users rely on these platforms to get news and information. They can freely consume and distribute information from varied sources: news outlets, journalists, and ordinary citizens who post events based on their perspectives (Zubiaga et al., 2016). They also use this to communicate work-related matters. According to Kemp (2020), 41% of social media users use social media for work, such as communicating with colleagues.

On the other hand, companies and corporations use social media to build their brand, increase visibility, and promote and sell their products. Social and digital

marketing offers significant opportunities to organizations through lower costs, improved brand awareness, and increased sales (Dwivedi et al., 2020). Sharing general updates, communicate directly with customers, and sharing marketing messages are the main reasons companies use social media (*Digital 2020 Global Digital Review*, 2020). Further, some platforms also allow direct selling of products. In 2007, Facebook opened its Marketplace, which lets its users post classifieds to sell products and services (Boyd, 2019).

Moreover, digital and social media technologies and applications have also been widely used for creating awareness of public services and political promotions (Dwivedi et al., 2020). Non-government organizations, advocacy groups, and political parties use social media to promote their cause, influence the users' views, or inform them about the available services.

Social Media Penetration

According to *Digital 2020 Global Digital Review* (2020), as of October 2020, 4.14 billion people worldwide, or 54% of the population, are on social media. An average of nearly 2 million new users join every day. Overall, users spent about 2 hours and 29 minutes on social media and 6 hours and 55 minutes on the internet. (Kemp, 2020).

The percentage of the population who use social media differs in each region. The highest penetration is in Eastern Asia, with 71% of the total population using social media, followed by Northern America (69%), Southern America (67%), Northern Europe (67%), Central America (64%), and Southeast Asia (63%). The regions with the lowest social media penetration are Middle Africa (6%), Eastern Africa (8%), and Western Africa (13%).

The top ten most-used social platforms are Facebook, YouTube, WhatsApp, Facebook Messenger, Weixin/WeChat, Instagram, Tiktok, QQ, Duoyin, and Sina Weibo.

There are 2.14 billion Facebook users spread across different age ranges: 123 million are 13-17 years old, 502 million are 18-24 years old, 280 million are 25-34 years old, 160 million are 35-44 years old, 110 million are 45-54 years old, 80 million are 54-64 years old, and 53 million are 65 years old and above. YouTube and WhatsApp have 2 billion users each, while Facebook Messenger and WeChat have 1.3 billion and 1.21 billion users, respectively. The use of these social media platforms overlaps with each other. Most of the Facebook users also use YouTube (90%), Instagram (73%), Tiktok (38%), and other platforms.

About 82.4% of female social media users and 82.3% of male social media users are between 16-24 years old. This group uses social media to communicate. This is higher when compared to other age groups – 68.7% (female) and 79.2% (male) 25-34 years old; 60.8% and 70.3% 35-44 yo, 39.8% & 47.3% 45-54 yo, 30.7% and 33.7% for 55-64 years old. Furthermore, among the 2.14 billion Facebook users, 123 million are 13-17 years old, 502 million are 18-24 years old.

In the Philippines, as of January 2020, 67% of the population or 74 million people are active social media users. They spend an average of 3 hours and 53 minutes on social media platforms (*Digital 2020: The Philippines – Data Reportal – Global Digital Insights.*, 2020). This data is higher than the worldwide average. The high number of active social media users in the Philippines is associated with the

younger population. Almost forty-two percent (42%) of the active social media users are young people ages 13-24 years old; while 14.1% are 35-44 years old; 7.1% are 45-54 years old; 3.7% are 55-64 years old; and, 2.4% are 65 years old and above. Ninety-seven percent (97%) of them use their mobile phones to access their social media accounts. Furthermore, the most used social media platforms in the Philippines are Facebook (70 million), YouTube, FB Messenger, Instagram (11 million), Twitter (6.63 million), Skype, LinkedIn (8.3 million), Pinterest, Viber, and Snapchat, with 7.35 million users (*Digital 2020: The Philippines – DataReportal – Global Digital Insights.*, 2020).

The Impact of Social Media

Social media plays a tremendous role in our lives. In a research study at the University of Missouri-Columbia, they found that social media users “do not consider social media an activity; instead, social media has become a part of their daily life” (Fiester, 2016). However, despite the benefits of using social media, it has several adverse effects, too. Christensen (2018), in his study, found out “that the more time an individual spent on social media, the more likely they were to experience a negative impact on their overall emotional wellbeing and decreased quality in their relationships.” It is foreseeable, as sharing on social media is mostly about personal lives such as travel destinations, career accomplishments, delectable food, purchase of a house or a car, possession of luxury items, fashion, etc. Hence, envy among each other occurs. Furthermore, users “only share that which is positive, happy, and exciting thus creating the false notion that all is well and good in their lives” (Christensen, 2018); other people who may not be experiencing the same life events may then compare themselves to those whom they see online, and feel bad about themselves.

Aside from that, social media users experience gratification from the positive reaction they get on social media. Most of the time, the number of likes and hearts they receive from posts or stories affects their emotional well-being. Indeed, Christensen (2018) points are valid that “...there are elements of social comparison and validation from others that put their happiness in the hands of their peers.”

Hence, “those who were heavy Facebook users experienced higher levels of envy and depression which caused them to engage in Facebook surveillance because the more they saw on Facebook, the more they wanted and the worse they felt” (Christensen, 2018). Another study in the United States by He et al. (2010) supports this account. They found out that “people who spent a lot of time communicating online (e.g., using chat rooms, SNS, and instant messenger) felt lonelier than those who spent less time or no time at all online.” Furthermore, in an experimental study by Deters & Mehl (2013), it was also found out that, “students who posted more frequent status updates had reduced levels of loneliness and that this effect was due to an enhanced feeling of connectedness.”

Social media affects relationships, too. The study found out that the “most common response for the negative impact of social media on relationships is that it distracts the user from engaging in face-to-face interactions with other people or activities, thus making the user less social offline” (Christensen, 2018).

With this, the social media use of young people, especially adolescents, raises serious concern for parents, teachers, and healthcare professionals. Social media has

become an irrevocable part of their lives, and the adolescents are not excluded from these detrimental effects.

The Facebook Era

Facebook is “a social media and social networking service” (Wikipedia contributors, 2021) based in Menlo Park, California. It was founded by Mark Zuckerberg and his fellow Harvard students in 2004, and it can easily be accessed via a computer or a smartphone. Through this social media, users can upload their photos or videos, post their status, expand their network by adding friends, access groups that share the same interest, or browse and avail products through different items and services via Marketplace.

Facebook, Inc. developed its messaging app, called Facebook Messenger, which can be downloaded on Android or iOS devices. Through it, “[u]sers can send messages and exchange photos, videos, stickers, audio, and files, as well as react to other users’ messages and interact with bots. The service also supports voice and video calling” (Wikipedia contributors, 2021a).

Facebook has seen many transformations and additions to how it looks today: use of Newsfeed, lowering of users’ age to 13 (2006), the Like Button (2009), Timeline (2011), and Facebook Live (2016) (Greiner et al., 2019). In 2017, Facebook Stories went live.

There are many reasons why people use Facebook – messaging, sharing status updates, uploading pictures, joining groups, looking for items to buy, and even promoting a cause or a business (Abram, 2016). With its different functionalities, users can establish a timeline or profile. The user can post their status (from what they are doing to what they are feeling, or even declare their political beliefs, and more), search for people, add them as friends, upload their pictures, and join groups (Abram, 2016). These functionalities drive the platform’s popularity. These may also be the reason why Dogruer et al. (2011) found out that the majority of their participants “believe that Facebook provides past time, is very lively and colorful...” In addition, Facebook enables the users to “re-establish connection with the people they had forgotten and to get in touch with people they knew.”

However, some research dug more profound to the main reason why Facebook is popular. In a study done by Nadkarni & Hofmann (2012), they found that “extraverted individuals reported higher levels of both SNS use and addictive tendencies.” In the same study, it was cited that there was a “positive association between narcissism and FB use, primarily through FB profiles and photos, the features that allow excessive self-promotion (Buffardi & Campbell, 2010, as cited in Nadkarni & Hofmann, 2012). The authors further explored other theories as to why Facebook’s popularity fulfills the users’ need to belong and need for self-presentation.

There have also been several studies that attempted to go beyond the functionalities of Facebook as the reason why people use it. A study stated that outgoing and socially confident users “reported higher levels of both SNS use and addictive tendencies” (Nadkarni & Hofmann, 2012). The same authors reinforced this by stating that “unlimited contact with friends on FB may appeal to extraverts’ need for a high level of stimulation and a large social network.” However, the platform also worked for shy individuals who “spent more time on FB and had a more favorable attitude toward FB (Orr et al., 2009, as cited in Nadkarni & Hofmann, 2012).

The study pointed to the need of belongingness and self-presentation as another set of reasons why people are enamored with the platform. There is a tendency for people to share information with the hopes of getting popularity. It is connected to the idea that “self-worth and self-esteem are closely associated with the need to belong.” People feel that they belong when their self-esteem is high. When this goes low, it “serves as a warning signal of potential social exclusion and motivates the individual to take steps to avoid rejection and improve one’s standing in the social hierarchy.” To enhance one’s self-esteem, one has to be exposed to the information found on their Facebook profile. This information can then be edited with only the excellent information present. It suggests that digital self-presentation can alter self-assessment (Gonzales & Hancock, 2010, as cited in Nadkarni & Hofmann, 2012). Furthermore, the authors suggested that the need for self-presentation is fulfilled as Facebook allows its users to “display their idealized, rather than accurate, selves through their profiles.”

Sharing information is a requirement for Facebook to work, but why do people share private information? Some studies suggested that a high level of narcissism is connected with more frequent disclosure of private information on Facebook (Smith, Mendez, & White, 2014, as cited in Blachnio et al., 2016). This sharing of private information is more prevalent in young people who disclose more private information on Facebook than adults (Christofides, Muise, & Desmarais, 2011, as cited in Blachnio et al., 2016). The authors further stated that “young people put private information on their Facebook profiles because they feel lonely.” It was also proven by Deters and Mehl (2013) that people felt less lonely and more connected with friends after increasing the instances of their status updating activities.

Another reason why people use Facebook is that online interactions appear as an alternative to face-to-face communication (Moreau et al., 2015). The authors provided evidence cited by different studies conducted on students (Sheldon, 2008) and adolescents (Moreau et al., 2012). They added that “avoidant and anxious individuals would be more attracted to online interactions than face-to-face, which looks like less threatening.”

Issues and Concerns on Social Media

Almost forty-two percent (42%) of the active social media users are young people ages 13-17 years old and 18-24 years old. Though “using social media can enhance communication, social connection and even technical skills of young people” (O’Keeffe and Clarke-Pearson, 2011), these social media platforms, aside from causing negative impacts on young people’s well-being, are not safe and secure.

In social media, a user can create a pseudo persona. Kemp (2020) stated that one internet user has “an average of 8.3 social media accounts,” and in the Philippines, there are likely “9.9 social media accounts per internet user”. Some users who have multiple accounts can use their fake accounts to harm other users. Hence, several reported crimes on social media include cyberbullying, online violence and abuse, identity theft, and financial scams.

Furthermore, social media has turned out to be the new venue of propaganda and fake news. In the Philippines, many of the so-called “keyboard trolls” are hired to spread propaganda in support of President Rodrigo Duterte and his policies (Bradshaw and Howard, 2017). Social media manipulation aims to shape the views

and behavior of the users. It is hazardous for young people, especially adolescents, as they might find it difficult to discern the truth from lies.

Cyberbullying. It is a form of bullying that takes place online, such as on social media platforms. Posting rumors, hate speech, making fun of someone's attributes, sexual remarks, and threats are examples of cyberbullying. It is pervasive today. In a recent study in the United Kingdom, among their research participants, 46% reported being bullied more than once, and 20% of them reported bullying others on social networking sites (Ditch the Label, 2020). Indeed, "social networking sites are fertile grounds for online bullying" (Chan et al., 2021). SNS or social media features that make them conducive include digital profiles, relational ties, search and privacy, and network transparency (Chan et al., 2021). These features of SNS or social media provide the security of anonymity to potential offenders. Hiding behind the keyboards and protected by their fabricated names, offenders commit these acts freely (Chan et al., 2021; Kane et al., 2014).

Meanwhile, Carter (2013) conducted a study on 259 undergraduate students enrolled at an international university in Singapore. The study focused on the "students' perspectives on protecting oneself from cyberbullying on social media sites." The participants suggested different measures for cyberbullying victims to protect themselves. It includes "upgrading online security, monitoring and limiting access to networking sites, defending themselves online or face-to-face, ignoring the bait of the bully and investing oneself in life energizing activities."

Online violence and abuse. These have been far too common everyday experiences. Sometimes, people are not aware that they are already victims, even though these have a devastating impact on their mental health. Reports show that most victims are women and girls.

In a survey conducted among 14,071 teenagers and young women aged 15-25 years old across 22 countries, it was found out that 59% of the respondents experienced abusive and insulting language; 41% experienced deliberate embarrassment; 39% encountered online body-shaming; and 39% received online threats of sexual violence (Davey, 2020).

Identity theft. It happens when someone steals your personal information to commit unlawful acts. According to DeLiema et al. (2020), "the available literature on identity theft suggested that attaining an arrest for identity theft is especially difficult." Due to these circumstances, the perpetrators are pretty confident in committing this crime. They use other people's details to gain something for themselves, such as financial rewards.

Social media manipulation. It is the use of social media to manipulate public opinion. According to Carpenter (2020), computational propaganda and social manipulation have increased by 150% in recent years. Examples of social media manipulation are planting and amplifying misinformation using trolls or bots and using social media algorithms to coordinate action across multiple user accounts to force topics, keywords, or questions into the public conversation (*Media Manipulation & Disinformation*, n.d.)

In the Philippines, many of the so-called "keyboard trolls" are hired to spread propaganda in support of President Rodrigo Duterte and his policies (Bradshaw & Howard, 2017). As Brillon (2014) noted, "in the age of new media where everyone is

'free' to source and distribute information, unverified and unreliable information becomes accepted as facts."

Further, Zubiaga et al.'s (2016) study show that "people tend to support unverified information seen online." Usually, these start as unverified information posted unintentionally or intentionally to manipulate the public; they then spread to many users, "influencing perception and understanding of events, despite being unverified" (Zubiaga et al., 2016).

Online Privacy on Social Media

There is no doubt that social media has changed how we communicate and interact and even how we live to a certain extent. Nowadays, sharing self-portraits, achievements, relationships, and even personal information has become the trend. The boundaries between our public and private lives have become blurred. Indeed, "social media challenge our understanding of privacy and privacy routines" (Trepte, 2015). Some people are starting to be concerned about this. For example, in a study in the Midwestern USA by Debatin et al. (2019), forty-seven percent (47%) said they restricted access to their Facebook profile because they are generally cautious, and 38% did so because they had heard "some concerning stories." Furthermore, 69% of the respondents indicated that they had changed their accounts' default privacy settings, and about half reported that they restricted their profiles so that "only friends can see [them]." The issue of privacy in social media is getting some attention, albeit the numbers are relatively low.

Hence, scholars are fascinated by why people disclose personal facts on social media sites. Some say it is because of the social media sites' design itself that encourages people to tell. Others argue that it is because of the trust that users have in each other. The higher confidence of the people in the platform and the higher levels of trust people have in the individuals within their network, the higher the chance they will share their personal information. Furthermore, according to Waldman (2016), trust, for example, on Facebook, is "correlated with having friends on Facebook that users trust." Hence, they encourage sharing by letting users know that their friends have also shared. It is true because, on Facebook, you can receive a notification when your friend or a page you follow shared something. Therefore, despite the risks, many people trust social media platforms and sharing personal information about their lives. After all, why would one's friend post something online if they deem it unsafe? Indeed, this is congruent with what Waldman (2016) said that "trust includes the willingness to accept some risk and vulnerability toward others to grease the wheels of social activity."

Meanwhile, in a research from Gupta & Dhama (2015), users who control their information flow and protect their profile are more likely to trust Facebook. The existence of privacy settings on social media sites, like Facebook, gives users a sense of control over their privacy and safety online. And these security features also instigate the individual belief that accessing social media sites over the internet is secure and safe. As Gupta & Dhama (2015) argue, perceived privacy and perceived security leads to perceived trust. Trust fuels users' willingness to share information; however, privacy alone does not directly affect sharing information.

Managing Online Privacy

Online privacy literacy is about understanding what may happen to personal information online and active participation (Wissinger, 2017). Critical thinking is essential to be online privacy literate, especially when navigating the online environment (Mackey and Jacobson, 2014). However, for adolescents, being logical may be a challenge.

In a study at a university in Southeastern USA by Yerby et al. (2019), it was found out that users find it risky to disclose personal information because of the amount of data being collected, inadequate protection against deliberate or accidental errors, and lack of awareness of the social media sites on information privacy practices. However, the respondents of this study are Information Technology students, who are very knowledgeable on social media, data, and IT matter. Hence, the findings of this study do not reflect the situation of ordinary social media users, like those of the high school students whom Gogus & Saygin (2019) investigated. Their study showed that “high school students do not care about the audience settings of their photograph and shared contents.” Furthermore, in the research study on Internet habits and safe Internet use of children in Turkey and Europe, Kasikci et al. (2014) state that “the majority of children’s Internet skills are not adequate, and they are exposed to many online risks.”

These findings are alarming because young people are the most active social media users. According to *Digital 2020 Global Digital Review* (2020), young people spend an average of 3 hours and 53 minutes per day on social media. They usually reveal a generous amount of personal information on social media, and they don’t take precautionary measures to protect themselves online. They are also prone to engage in risky activities online and fall prey to online sexual predators. Some are not aware of the privacy settings and their implications, while others may have little knowledge about them but do not take the necessary actions to protect themselves.

In the Philippines, 67% of the social media users expressed concerns about using their data (*Digital 2020: The Philippines – DataReportal – Global Digital Insights.*, 2020). Though there are no available data to show how many of them do something to protect themselves on social media, we assume that the so-called privacy paradox occurred. According to Barth & de Jong (2017), the privacy paradox is the discrepancy between user attitude and actual behavior. It means that while users claim to be very concerned about their privacy, they nevertheless undertake very little to protect their data.

Being Safe Online

With the numbers cited earlier, it is evident that many people are knowledgeable about the use of social media. But how familiar are they as far as online privacy is concerned? When does feeling safe become different from actually being safe in social media like Facebook?

In their study, Redmiles et al. (2019) found out that about 25% of the experiences “that made participants feel safe on Facebook involved the ability to control their privacy [with] only 6% of participants described experiences with actively enhancing security.” This finding suggests that the perceived knowledge on privacy

does not always equate to their basic safety. Feeling safe on Facebook is different from being safe on this social media platform.

Determann (2012) echoed this in his paper when he remarked that the threats brought by social media platforms come from the manner people use them. No matter how much control is available for the user as far as their privacy setting is concerned, “[t]he urge of individuals to be social and share information is what has the greatest effect on privacy.” It is similar to the findings that social media platforms have turned out to be a place where we store “many aspects of a person’s ‘self’” (Redmiles et al., 2019). It is easy to find photos, life events, places one has visited or is planning to visit, private messages, family members, and political views in one platform. These platforms have also enabled users to tag their location on images or posts.

One can argue that the options on what to share are always under the control of the users. The story, however, might be different for young users, particularly children. De Gruyter (2015) stated that children might not see social networking the same way adults do. While the children’s main aim is not to disclose personal information, their desire to meet new friends causes them to “exchange intimate details about themselves with people they do not know.” For teenagers, although the enthusiasm for using Facebook is waning, usage is still being kept as this participation via social media “is an important part of overall teenage socializing” (Madden et al., 2013). The fear of missing out is present, and staying online on platforms such as Facebook can minimize this fear.

Despite the presence of the controls in social media platforms, Bartsch & Dienlin (2016) found out that “in online contexts, we arguably do not really ‘lock our doors.’” They added that users may not be showing “sufficient online privacy behaviors because they might not be capable of putting them into practice.” It is interesting to know how one balances the desire to share, be part of a community, be involved in a discussion, and be updated with what is happening in one’s circle of friends and one’s need to be safe and maintain privacy through different social media platforms.

Hence, social media users may be aware of privacy settings, but their behavior doesn’t show this. In a research on the behavior of social media users when sharing contents online, Reynolds et al. (2011) noted that their “participants showed little intent to hide the information they shared from a friend or group of friends...and most...admitted never having used Facebook’s feature that would allow them to do so.” While the participants expressed concerns about their privacy online, their actions spoke differently as sharing things and posting pictures as they happen continually. The research, however, suggested that older social media users tend to be more concerned about their privacy. In fact, “their attitude was reflected in their posting practices.” They set their privacy in a more restrictive way compared to “younger participants [who] were more permissive and adopted looser controls when sharing information.” According to the authors, it can be attributed to the fact that the younger users have “more familiarity and trust in services like Facebook.”

This trust is also highlighted by Hoofnagle et al. (2010) when comparing young adults and older adults on their attitudes towards privacy. While they acknowledged the conclusion of a study that stated that “adolescents and youths are more inclined toward risky behavior and risky decision making than are adults,” is their study suggested that it is the trust in existing laws to protect the youth’s privacy online that may be the reason that many of them “engage with the digital world in a seeming unconcern manner.” The point may be valid for those who have experienced laws protecting their privacy in a different scenario. However, the authors also noted that “the benefits of looking cool to peers may outweigh concerns about negative

consequences, especially if those potential consequences are not likely to happen immediately.” These perceived benefits tend to outweigh the perceived risks of sharing or oversharing on social media platforms. Carruth & Ginsburg (2014) supported when they stated that the benefits users get from Facebook outweigh “privacy concerns, even when the user experienced privacy invasion.” One of the benefits is the ability of social media to enable users who are not comfortable with face-to-face interactions to interact with others. They also allow the users to be part of a group that users can identify with and possibly be part of a community.

Unpacking the Adolescents’ Behavior

Why do adolescents behave this way regarding social media privacy and safety? Adolescence is the period of transition from childhood to adulthood. The adolescence stage is also divided into the early period (10-14 years old), middle period (15-17 years old), and late period (18-19 years old). These periods roughly correspond to the phases in adolescents’ physical, social, and psychological development (World Health Organization, n.d.).

A lot of changes are happening during this stage. The adolescent brain is still developing, and there could be limitations because some parts are not yet fully developed. The cognitive restriction could be in their decision-making process because the adolescent brain is not yet fully mature. According to Steinbeis & Crone (2016), “the development of the prefrontal cortex and associated cognitive control has been shown across various studies to be especially important for decision-making....” The brain doesn’t finish developing and maturing until the mid-to-late 20s, and the prefrontal cortex is one of the last brain regions to grow (Lumen Learning, n.d.). They usually behave in an impulsive, irrational, and dangerous way. It seems like they don’t fully consider the consequences of their actions (*Teen Brain: Behavior, Problem Solving, and Decision Making. Facts for Families*, 2016).

Yet, adolescents make decisions for themselves already despite their young age, especially while using social media. Based on the Communication Privacy Management (CPM) theory, a systematic research theory designed to develop an evidence-based understanding of the way people make decisions about revealing and concealing private information (“Communication Privacy Management Theory,” 2021), adolescents are motivated to regulate the access and sharing of their personal information on Facebook because they believe they own the information and are justified to control how the information will be accessed, shared and used (Petronio, 2013; Yang et al., 2016). It makes them very vulnerable to online privacy risks.

Synthesis

Despite the digital divide or the separation of those who have access to computers and smartphones and those who do not have access to them, the continuous increase of social media penetration seems to be inevitable. Social media has been around for more than a decade. For Filipinos, especially adolescents, Facebook has been deeply taught in our lives. We use it for several reasons, and it may now seem impossible to live without it.

Thus, the issues and concerns related to Facebook use of adolescents are sure to happen if preventive measures are not observed. Based on several research studies reviewed, Facebook use has several risks, and privacy is a concern. Most people express concerns about it but do not take action to protect themselves. Furthermore, when it comes to adolescents, some papers say that they are knowledgeable, while others say that they have little knowledge about online privacy and cybersecurity. However, these research studies are from Western countries. Only a few articles have been written about the Filipinos' perception of online privacy risks in the intensive online materials search. There are very few materials, too, about Filipino adolescents. Most of the research papers about the Philippines talk about the extent of social media use, e-commerce, or the effect of social media on young people's education.

Chapter Three FRAMEWORK OF THE STUDY

Theoretical Framework

The study builds upon the Communication Privacy Management Theory of Sandra Petronio. It is a systematic research theory designed to develop an evidence-based understanding of how people make decisions about revealing and concealing private information (“Communication Privacy Management Theory,” 2021). It states that boundaries protect private information, and “once private information is shared, co-owners must coordinate the boundaries of privacy and disclosure based on boundary permeability, boundary linkage, and boundary ownership” (Petronio, 1991).

Boundary permeability rules of private information determine how much others can know about the information. The boundary linkage rules of private information have to do with who else can see the information (Child et al., 2009). Meanwhile, boundary ownership rules of private information are about understanding whether information should be shared, whom it should be shared with, and when it should be shared (Petronio, 1991), and “how much control they have over an information, including their rights and responsibilities,” (Child et al., 2009). However, in this study, “perceived control of private information” (Spiekermann, 2005; Yang et al., 2016) is being treated separately from boundary ownership rules, because boundary ownership is about who, what, and when to share information, while the latter is about the perception of having the ability to control the information.

Furthermore, CPM theory has six propositions: *Proposition 1*: From a behavioral perspective, CPM argues that people believe their private information belongs to them; *Proposition 2*: Because people believe that they own their private information, they also think that they have the right to control the flow of that information; *Proposition 3*: In order to control the flow of private information, people develop and use privacy rules based on criteria important to them; *Proposition 4*: When individuals grant access to their private information through disclosure or other means, that information enters into collective ownership, which represents an extension of the privacy boundary; *Proposition 5*: Once the information becomes co-owned and collectively held, the parties negotiate collectively agreed upon privacy rules for third-party dissemination; and, *Proposition 6*: Given that people do not consistently, effectively, or actively negotiate privacy rules for collectively held private information, there is a possibility of boundary turbulence (Child et al., 2009).

Indeed, the propositions are the general statement, but the population is not homogenous. They may apply to a specific population group but not to others, especially to the younger age group. Hence, the study also explored the relationship of age to online privacy management because there are several studies (De Gruyter, 2015; Madden et al., 2013; Hoofnagle et al., 2010) that say adolescents may not see social media, such as Facebook the same way as adults do, and they are more inclined to risky behavior and decision-making.

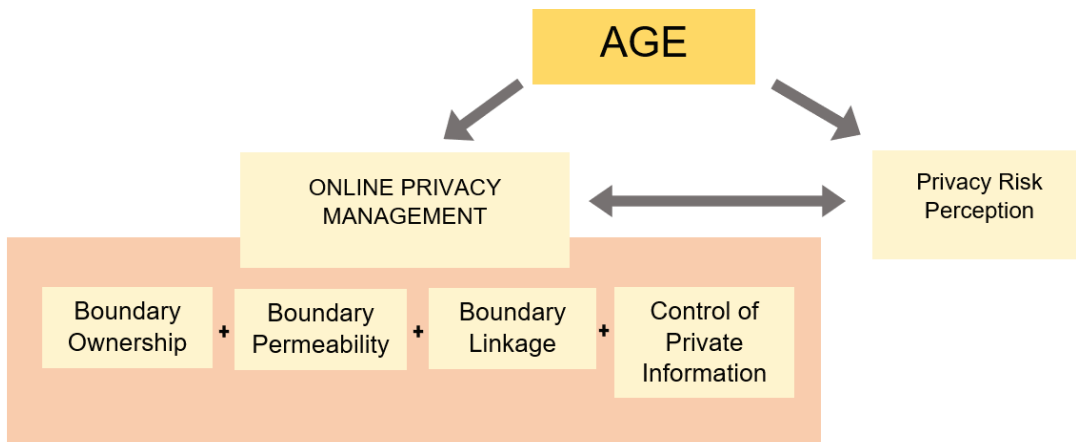
Moreover, the CPM theory provides a general list of criteria for developing personal or group privacy rules. They are the following: cultural, gender, context, motivation, and risk or benefit ratio (Petronio, 2007). Cultural is about the norms and culture; gender is men, women, or non-binary; context is about the environment; motivation happens because owners of information form certain bonds for disclosure;

and risk or benefit ratio is about the owner's evaluation of risk relative to the benefit of disclosure (Wikipedia contributors, 2021). Among the criteria, the study focused on evaluating risks, particularly the privacy risk perception, because several studies (Debatin et al., 2019; Trepte, 2015) relate the perceived privacy risks to the practices on online privacy management.

Using the CPM theory, this study assumes that despite the young age, adolescents are motivated to regulate the access and sharing of their personal information on Facebook (Petronio, 2013; Yang et al., 2016). Furthermore, this study also undertakes that age has no relationship with online privacy management based on the CPM's privacy rules. Hence, adolescents can control their private information (control of private information); they have control over the spread of information that they own (boundary ownership rules of private information); they can determine the amount, breadth, and depth of personal information that they will disclose (boundary permeability rules of private information); and, they can grant others access to their private information (boundary linkage rules of private information). On the other hand, this study affirms that evaluating risks, as one of the personal or group privacy rules criteria, affects adolescents' online privacy management.

Conceptual Framework

Figure 1. The Conceptual Framework



Framework of the Research

Last February 2021, the research proposal was presented to the advisers, and there were several suggestions to improve the study. This was then revised and submitted to the thesis adviser in April 2021. A few weeks later, the researcher was advised to proceed with the data gathering.

The research instrument was inputted in Google Form survey and sent to 6 selected students from Commonwealth Elementary School and Commonwealth High School for piloting. After answering the survey, they were interviewed one by one about 1) length of the questionnaire; 2) questions or terms they didn't understand; and 3) sensitive questions. The four respondents said the length of the questionnaire was just right, while 2 of them said it was a bit long; all of them answered that they understood all the questions and didn't find any of the questions sensitive. With the feedback gathered from the pilot study, the research instrument was not revised.

Next, it was encoded online using Google Form survey, and a survey link was generated. I used TinyURL to customize and shorten the survey link so that it can be easily remembered. The survey link generated was www.tinyurl.com/pinas32.

After that, by May 2021, communication letters were sent to Commonwealth High School and Commonwealth Elementary School Principals. A few weeks later, I received their response; they advised me to seek permission from the Quezon City School Division Superintendent. So, by June 3, 2021, I wrote to the School Division Superintendent. A week later, I received an email that my request had been approved; however, face-to-face interactions and class interruptions were strictly prohibited. The approval letter from the School Division Superintendent was then forwarded to the School Principal. A few days later, I received a go signal from the Commonwealth Elementary School; but it took a few weeks to receive a response from Commonwealth High School because they were already preparing for the closing of classes. The School Principal designated a focal person who would help me with the data gathering.

I asked for a copy of the sections and population size list and conducted a stratified random sampling using the online tool, Randomizer.org. After the sections had been selected, it was forwarded to the focal persons in CES and CHS, along with the survey link. I provided the instructions to the focal persons, and they relayed them to the teachers. The class section advisers then gave the instructions to the students of the selected class section. A few days later, I started to receive responses from CES and CHS. The first response was generated on July 1, while the last response was on July 20. However, the survey was ongoing until July 31, 2021. It ran for a month, but since the school year in CES and CHS ended on July 16 and 23, no responses were received after July 20.

After receiving all the responses, they were downloaded from the Google Form in MS Excel format, and data cleaning was done. Some of the answers in the demographic section of the survey questionnaire were re-encoded to correct the spelling. Then, each item and answer were given codes, such as A1, and 1, 2, 3, etc., so it can be analyzed easily. The Likert Scale answers were also given a numerical value of 1, 2, 3, 4, and 5. After the coding, it was transferred to the SPSS Statistics software to generate the descriptive analysis, while the inferential analysis using correlation was done through MS Excel. Then, the results have been summarized and written.

Chapter Four METHODOLOGY

The Research Design

This study is concerned about how the adolescents manage their online privacy on Facebook. With that, a quantitative research method using a survey research design, specifically a cross-sectional survey, was utilized.

Quantitative research is “the process of collecting and analyzing numerical data” (Bhandari, 2020). While, according to Alreck & Settle (1985), as cited by Librero et al. (1997), the survey research design will answer the questions about the distribution of relationships among the characteristics of people as they exist in their natural settings; and according to Owens (2002), as cited by Librero et al., (1997), “cross-sectional survey makes it possible for a group of respondents to be asked a set of questions at one point in time.” The study is also a correlational survey since the relationship of the variables was determined.

Though surveys have limitations such as being “dependent upon the chosen sampling frame and it is not effective in explaining why people think or act as they do” (Mathers et al., 2007), they offer ease of administration and flexibility that are vital to carry out this research given the uncertainty brought by the COVID-19 pandemic lockdowns and limitation in activities and movement.

Thus, through a sample survey or surveying a population sample, the study gathered the data to know how adolescents manage their online privacy on Facebook and what they perceive as privacy risks. A survey questionnaire was developed to collect this information from the target respondents.

Variables of the Study

The study’s dependent variable is the online privacy management as perceived and practiced by the respondents and their privacy risk perception. The independent variable is the age of the respondents.

Respondents of the Study

The study’s respondents are adolescents or “any person between the ages of 10 and 19” (World Health Organization, 2018). It is the period of transition from childhood to adulthood and is defined by the “transition from parental dependence to relative autonomy” (Heyes & Hiu, n.d.). Sometimes, the adolescence stage is divided into the early period (10-14 years old), middle period (15-17 years old), and late period (18-19 years old). These periods roughly correspond to the phases in adolescents’ physical, social, and psychological development (World Health Organization, n.d.).

The adolescent years are crucial because essential changes in the body occur that might have a long-lasting impact if not properly taken care of. Ensuring their safety while they explore relationships and connections through social media is vital for their

future. Hence, knowing how they manage their online privacy on Facebook would be helpful to understand their situation. With that, the selected adolescents were subjected to a survey. Based on the age range of the adolescents, which is 10-19 years old, the respondents are between Grade 5 to 12. And since the study is about online privacy literacy, it would be more significant if the respondents were those adolescents undergoing online classes.

The study was conducted in Quezon City, the most populous city in the Philippines, with 2.9 million residents. It is also one of the cities with the highest number of Facebook users with 170% - 240% Facebook penetration (Tantuco, 2018). The selected schools are Commonwealth Elementary School and Commonwealth High School. They are both public schools and two of the most populated schools in the city.

Sampling Procedure

This study utilized probability sampling using a stratified random sampling technique. In probability sampling, “all individuals in the population have the opportunity to be selected as part of the sample” (Librero et al., 1997). At the same time, the stratified random sampling technique involves the division of a population into a smaller sub-group known as strata (Hayes, 2020).

Since the target respondents were between Grade 5 to 12 adolescents, the stratification was based on grade level, and the strata were Grade 5, Grade 6, Grade 7, Grade 8, Grade 9, Grade 10, Grade 11, and Grade 12. Among the class sections, 50% have been selected as the sample for each grade level. Since classes are not separated based on delivery in the selected schools (e.g., online, modular, or blended), all class sections were given equal opportunity to be chosen, using randomizer.org, an online tool that randomly selects the sample.

In total, there were 270 sections with 10,966 students, and among the class section, I selected 50% to be part of the sample: 12 sections for Grade 5 and Grade 6, 25 sections for Grade 7, 24 sections from Grade 8 and Grade 9, 22 sections for Grade 10, 9 sections for Grade 11 and 8 sections for Grade 12.

Using the stratified random sampling, all the sample sections of each grade level were arranged alphabetically, from A to Z, and they were given corresponding numbers, starting with 1. Then, the online random picker was customized to select the corresponding numbers of sample sections randomly. The selection of the sample sections was made per grade level (*Table 1*).

The Research Instrument

A survey questionnaire (*see Annex A*) in Filipino or Tagalog language was developed as the research instrument. The questionnaire was adapted from the research instrument in the research study of Child et al. (2009), Yang et al. (2016), and Spiekermann (2005).

It was divided into six parts. The first part was about the respondents' demographics and their Facebook use. The second to fifth part was about how the respondents manage their online privacy on Facebook – control of private information

on Facebook (6 statements); and the three (3) privacy rules of CPM theory, which are boundary ownership rules of private information (6 statements), boundary permeability rules of private information (6 statements), and boundary linkage rules of private information (6 statements).

The questionnaires for control of private information on Facebook were adopted from the research instrument in Yang et al. (2016) study about the Twitter users, which was based on statements developed by Spiekermann (2005) in her research Perceived Control: Scales for Privacy in Ubiquitous Computing. Meanwhile, the questionnaires for these three privacy rules were based on the 18-item blogging privacy management measure (BPMM) of Child et al. (2009). Online privacy risk perception questions were based on the control of private information statements and the 18-item blogging privacy management measure (BPMM).

In total, 32 statements were answered using the 5-point Likert scale with categories of Strong Agree, Agree, Neutral, Disagree, and Strongly Disagree. Statements #1 to #6 were about control of private information; statements #7 to #12 were about boundary ownership rule of private information; statements #13 to #18 discussed boundary permeability rule of private information; statements #19 to #24 were about boundary linkages rule of private information, and statements #25 to #32 were about online privacy risk perception.

Procedure for Data Collection

For this study, a survey questionnaire was used. It is an instrument that “usually asks questions that elicit ideas and behaviors, preferences, traits, attitudes and facts” (Sincero, 2012). The main advantage of a survey questionnaire is it is practical, efficient, and flexible.

The survey questionnaire was completed independently by the participants, and it was administered online, using Google Form. The survey link was relayed to the respondents by their teachers and focal persons. The data collection was for a month. To ensure confidentiality, no personal details were collected.

Procedure for Data Analysis

Descriptive and inferential analyses were employed to analyze the quantitative data gathered. Using descriptive analysis, the collected data were described and summarized. Characteristics of the respondents were also described based on their socio-demographic profile and social media use. Meanwhile, inferential analysis using Pearson Correlation Coefficient was used to test the hypothesis or create predictions and draw conclusions. It analyzed the relationship between age and adolescents' online privacy on Facebook and their privacy risk perception. It was also used to know the relationship between how adolescents manage online privacy on Facebook and their privacy risk perception. The correlation thresholds used were: 0.00-0.39 as weak correlation; 0.40-0.69 as medium correlation; and 0.70-1.00 as strong correlation.

Figure 2. The Pearson Correlation Formula

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

r = correlation coefficient
 x_i = values of the x-variable in a sample
 \bar{x} = mean of the values of the x-variable
 y_i = values of the y-variable in a sample
 \bar{y} = mean of the values of the y-variable

Thirty-two statements were asked – 24 statements were meant to know how the adolescents manage their online privacy on Facebook, while the eight statements tried to capture their privacy risk perception. However, four of these statements are no longer included. The statement in the boundary linkages segment, which says, “I regularly update my Facebook with entertaining and detailed posts or stories,” and “I created my public profile so I can connect with my friends,” are disregarded because they were vaguely constructed. Furthermore, the boundary ownership segment, “I use a different name or alias when I discuss sensitive topics on Facebook so others won’t know my personal details,” and its privacy risk perception counterpart, “It is dangerous to join Facebook discussions about sensitive topics using your real name,” were also omitted.

All the answers were given corresponding numerical values, which were 1 for Strongly Disagree, 2 for Disagree, 3 for Neutral, 4 for Agree, and 5 for Strongly Agree. The responses for each statement were analyzed based on the frequency of its choice and its corresponding percentage. Then, the average answer for each statement and each segment (i.e., Control of Private Information, Boundary Ownership, Boundary Permeability, Boundary Linkages, Privacy Risk Perception) was determined and segregated by age.

To analyze the relationship between age and how adolescents manage their online privacy, the average answers for each statement segregated by age were used to run the Pearson Correlation Coefficient. However, for Boundary Permeability and Boundary Linkages, I reversed the rating because of negative statement. Instead of 1 for Strongly Disagree it became 5; and instead of 5 for Strongly Agree, it became 1.

Then, I determined the average of each segment (i.e., Control of Private Information, Boundary Ownership, Boundary Permeability, Boundary Linkages, Privacy Risk Perception). In some statements, age is being grouped into the following categories: underage Facebook users (10-12 years old) and allowed Facebook users (13-19 years old), and younger adolescents (10-14 years old) and older adolescents (15-19 years old).

After that, I also determined the average of the online privacy management segments: the Control of Private Information, Boundary Ownership, Boundary Permeability, and Boundary Linkages. I computed its correlation with age. The results answered the relationship between age and how adolescents manage their online privacy on Facebook.

I also determined the average of the Privacy Risk Perception segment and I computed its correlation with age. The results answered the relationship between age and the privacy perception of the adolescents.

To determine the relationship between privacy risk perception and how adolescents manage their online privacy, I used the average of the Privacy Risk Perception segment and the average of segments that comprise the online privacy management (Control of Private Information, Boundary Ownership, Boundary Permeability, and Boundary Linkages).

Chapter Five SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Results and Discussion

One thousand seven hundred eighty-nine (1,789) responses from 103 class sections of Grade 5 to Grade 12 are received. Among these responses, 76 are considered invalid. The respondents who refused to participate (9), who belong to other sections (26), who were more than 19 years old (21), who came from unidentified class sections (2), and who are in Grade 12 (18), which had a meager response rate (5%) are considered invalid responses.

Hence, among the responses received, only 1,713 responses from 98 sections are considered valid. Based on the valid responses (n=1,713), there is a 76.6% response rate based on class sections, while there is only a 32.9% response rate based on the total number of students per section (Table 2).

Moreover, 452 (26.4%) of the valid responses are from the students of Commonwealth Elementary School, while 1261 (73.6%) are from Commonwealth High School. Based on sex, 718 (41.9%) of them are male, while 992 (57.9%) are female and 3 (0.2%) identified as others. When it comes to age, 1,000 (58.4%) responses are from the 10-14 years old or the early period of adolescents, while 637 (37.2%) are from 15-17 years old or the middle period of adolescence, and only 76 (4.4%) are from 18-19 years old or the late period of adolescence (Table 3).

There are also different modes of classes. One thousand thirty-seven respondents (60.5%) are taking the online class, while others are taking printed modular (22.8%, both modular and online or blended (8.5%), digitized modular (6.9%), and both printed and digitized modular (0.8%). Eight respondents (0.5%) answered they don't know their mode of class.

Facebook use. Furthermore, 1,679 (98%) answered that they use Facebook, while only 34 (2%) said they don't. Among the Facebook users, 1,651 (98.3%) have their Facebook accounts, while 28 respondents (1.7%) don't have one, and they are using their mother, father, grandmother, or their relatives' Facebook accounts.

In total, 450 (27%) of the Facebook users are below 13 years old. 53 are 10 years old, 182 (11%) are 11 years old, and 215 (13%) are 12 years old. This data is surprising because Facebook has a regulation that only 13 years old and above can create an account.

Aside from that, the number of hours they spend on Facebook also varies – 456 (27.2%) spends less than one hour per day, 503 (30%) spends 1-2 hours per day, 296 (17.6%) spends 2-3 hours day, 197 (11.7%) spends 3-4 hours per day, and 227 (13.5%) spends more than 5 hours per day.

Additionally, 914 (54%) of the respondents use Facebook for school-related concerns, 599 (36%) use it for communication, connection, or interaction among family members and friends, 454 (27%) use it for entertainment, 284 (12.3%) use it to get information, 8 (0.5%) use it either for religion or business. In comparison, 40 (2.4%) didn't provide any response.

What the adolescents perceive as online privacy risks on Facebook. In general, adolescents perceive the online privacy risks related to controlling private information and coordinating their boundaries on Facebook as risks (average = 4.11).

Among the seven statements about privacy risk perception of adolescents, putting a lot of personal information on Facebook (average = 4.29) is the riskiest. The statement, "It is dangerous to put any personal information on your Facebook account," has the following results: 51.4% strongly agree, 34.8% agree, 8.2% neutral, 3.3% disagree, and 2.3% strongly disagree.

This statement falls under the risk perception related to boundary ownership of private information, which is about each person's responsibilities and rights over controlling the spread of data they own. When information is shared, the persons who've read that information are already co-owners. Hence, on Facebook, you don't know whom the people you've shared that information with are. So, you don't exactly know who the co-owners are of the information you've shared. Hence, adolescents generally think this is the most dangerous as compared to other privacy risks.

Furthermore, these are the privacy risks adolescents perceive in descending order. They think not having control over their own Facebook accounts is risky (average = 4.24), as well as accepting friend requests (average = 4.17) and sharing your day-to-day life (average = 4.17) to the people that they don't personally know. They also agree that it is dangerous to make your personal information and interests public on Facebook for the sake of being known and having friends (average = 4.13). They also agree that it is dangerous to post and talk about personal problems on Facebook (average = 4.10). They are also unsure and agree that being publicly searchable on Facebook is dangerous.

The responses to the statement, "Having control over my Facebook lessens the danger that it could cause," are 45% strongly agree, 41% agree, 10.5% neutral, 2.5% disagree, and 1% strongly disagree. Additionally, the statement, "It is dangerous to accept friend requests from people you don't know," has these answers: 48.4% strongly agree, 32.5% agree, 10.7% neutral, 5.1% disagree, and 3.3% strongly disagree. The responses are somewhat the same as the results of the statement, "It is dangerous to share your day-to-day life to the people you don't know in Facebook," which shows 44.8% strongly agree, 36.4% agree, 12.0% neutral, 4.6% disagree and 2.2% strongly disagree. Furthermore, the statement, "Making my Facebook profile public, so that other Facebook users with similar interests can contact me is dangerous," has the following responses: 44.0% strongly agree, 35.4.0% agree, 12.4% neutral, 5.6% disagree, and 2.6% strongly disagree. And, the statement, "It is dangerous to post and talk about on Facebook, the personal problems you are facing," has these results: 42.3% strongly agree, 36.0% agree, 13.8% neutral, 5.4% disagree, and 2.6% strongly disagree.

Meanwhile, the least dangerous privacy risk as perceived by adolescents is about being publicly searchable on Facebook and web search engines (average = 3.68). In this statement, the responses are 21.9% strongly agree, 35.9% agree, 33.1% neutral, 7.4% disagree, and 1.7% strongly disagree.

The relationship between age and the privacy risk perception on Facebook. Overall, there is a medium positive correlation ($\rho = 0.48$) between age and the privacy risk perception of the adolescents, which means the higher the age, the higher the perceived risk to privacy. Though all ages generally agree or are aware of the risks, the level of awareness increases as they get older. Moreover, the correlation between age and the privacy risks related to Communication Privacy Management (i.e.,

boundary ownership, boundary permeability, and boundary linkages) is more substantial ($\rho = 0.70$) than the overall privacy risks statement. The strong positive correlation means that as the adolescents get older, they are more aware of the risks of private information sharing and boundaries.

However, among the privacy risks, the statement with the strongest correlation to age is posting and talking about personal problems on Facebook ($\rho = 0.72$), which means that as the age goes higher, they agree that it is indeed dangerous. On average, all the adolescents are in the spectrum of agreeing and strongly disagreeing, except for the 10-year-olds, who fall between unsure and agree (average = 3.91). Hence, 14.5% of the 10-year-old adolescents think it is not dangerous to post personal problems on Facebook, and 16.4% are unsure. Additionally, 8% of all adolescents believe it to be not dangerous, and 13.8% are uncertain if it is dangerous.

Meanwhile, the statement, "It is dangerous to share on Facebook and with people that you don't know the daily events of your life," has the weakest positive correlation to age ($\rho = 0.24$). Though the result also means that as the age goes higher, they agree that it is dangerous to share your life's daily events, the correlation to age is weaker than the rest of the risk statements.

Furthermore, as adolescents' age goes higher, the more they strongly agree that it is dangerous to make your personal information and interests public on Facebook, for the sake of being known and having friends ($\rho = 0.62$), and to put any personal details on your Facebook account ($\rho = 0.57$).

Moreover, there is a weak positive correlation between age and the statement, "Being publicly searchable on Facebook and web search engine using my name is dangerous" ($\rho = 0.32$). Though their perception is between being unsure and agreeing, as the age goes higher, the lesser their uncertainty becomes, and the more they think it dangerous to make your name searchable on Facebook and other search engines. Among the adolescents, the 10-year-old is the most neutral that it is dangerous (average = 3.58).

On the other hand, a weak negative correlation between age and having control over one's Facebook account lessens the danger it could cause ($\rho = -0.21$). So, as the age goes lower, the more they agree that controlling lessens the risks.

There is also a weak negative correlation between age and the statement, "It is dangerous to accept friend requests from people you don't know" ($\rho = -0.30$). So, as the age goes lower, the more they agree that accepting friend requests from people you don't know is dangerous. Though, on average, adolescents agree that it is dangerous, younger adolescents agree more. However, 8.5% of adolescents think this is not dangerous, and 10.7% are neutral about it.

How the adolescents control their private information on Facebook. Generally, adolescents can control their private information, activities, and what they do on Facebook (average = 4.28). In particular, the survey results show that adolescents can control their Facebook activity in the right way (average = 4.48), and they can determine whom they accept a friend on Facebook (average = 4.40). They also affirmed that they know how to use their Facebook account (average = 4.48), and they determine for themselves whom they interact with on Facebook (average = 4.04). They also agreed that they could change their privacy settings on Facebook (average = 4.23) and only post when they want (average = 4.10).

Furthermore, the responses to the statement, "I can control my Facebook activity in the right way," are the following: 48.7% strongly agree, 44.8% agree, 4.5% neutral, 0.6% disagree, and 0.4% strongly disagree. And, the statement, "I determine

who I accept as a friend on Facebook,” gathered the following answers: 55.6% strongly agree, 36.3% agree, 6.5% neutral, 1.2% disagree, and 0.5% strongly disagree.

The statement “I know how to use my Facebook account” has the following replies: 56.3% strongly agree, 39.3% agree, 3.5% neutral, 0.5% disagree, and 0.4% strongly disagree. And, the results for the statement, “I determine for myself who I interact with on Facebook,” are: 36.3% strongly agree, 38.8% agree, 15.7% neutral, 7.4% disagree, and 1.8% strongly disagree. Also, the statement, “I have the choice to change my privacy settings in Facebook,” has the following answers: 46.9% strongly agree, 37.9% agree, 9.5% neutral, 4.6% disagree, and 1.1% strongly disagree. And finally, the response to the statement, “I only post on Facebook when I want,” are: 37.0% strongly agree, 43.3% agree, 12.9% neutral, 5.1% disagree, and 1.7% strongly disagree.

The relationship between age and how the adolescents control their private information on Facebook. Overall, there is a strong positive correlation ($\rho = 0.75$) between age and control of private information on Facebook. The higher the age, the higher the ability to control their Facebook account. Though all ages generally agree that they can control their private information on Facebook, the ability increases as they get older.

However, the statements, “I determine for myself who I interact with on Facebook,” and “I only post on Facebook when I want,” have the strongest positive correlation with age ($\rho = 0.91$). This data means that as the age goes higher, the more they agree that they can determine whom they interact with on Facebook. On average, the older adolescents agree to this statement (average = 4.30), while the younger adolescents are between unsure and agree (average = 3.77). The younger adolescents’ feedback about this statement is the following: 13.2% strongly disagree/disagree, 19.3% neutral, and 67.5% strongly agree/agree. Meanwhile, among the 10-12 years old, 61.9% agree that they can determine for themselves who they interact with on Facebook, 16% unsure, and 17.8% disagree.

Furthermore, as the age increases, they agree that they only post when they want. On average, the older adolescents agree to this statement (average = 4.30), while the younger adolescents are unsure and agree (average = 3.89). The younger adolescents’ feedback about this statement is the following: 9.3% strongly disagree/disagree, 16.2% neutral, and 74.5% strongly agree/agree. Meanwhile, among the 10-12 years old, 72% agree that they only post when they want, 17.2% unsure, and 10.8% disagree.

The statement, “I have the capacity to change my privacy settings in Facebook,” also has a strong positive correlation with age ($\rho = 0.83$). This finding means that as the age goes higher, they agree that they can change their privacy setting. On average, the 10-12-year-old adolescents are unsure and agree on this statement (average = 3.81). In contrast, the adolescents legally allowed to be on Facebook agree that they can change their privacy settings (average = 4.22). The 10-12-year-old’s feedback about this statement are the following: 12.7% strongly disagree/disagree, 14.8% neutral, and 72.5% strongly agree/agree.

Meanwhile, the statements, “I can control my Facebook activity in a right way,” and “I know how to use my Facebook account” have a weak positive correlation with age ($\rho = 0.12$; $\rho = 0.15$). The result means that as the age goes higher, they agree that they can control their Facebook activity the right way and know how to use their Facebook account. Older adolescents can control their Facebook activity, and they know how to use their accounts more than younger adolescents.

On the other hand, there is a medium negative correlation between age and the perceived capacity of adolescents to determine who they accept as friends on Facebook ($\rho = -0.33$). This data means adolescents agree to strongly agree that they can choose who they accept as friends on Facebook; however, as the age does higher, this confidence that they can determine who to accept as friends on Facebook lessens.

Boundary ownership of private information in Facebook. Adolescents have the awareness and conscious effort to limit what is shared, especially on Facebook (average = 4.22). In particular, they only have a few personal information on Facebook (average = 4.06), and they agree that if they think the information posted looks too private, they might delete it (average = 4.3). They also don't immediately post on Facebook the recent things that happened to them because people might talk about it (average = 4.31). They don't post specific topics on Facebook because they worry about the people who will see them (average = 4.25). Additionally, adolescents agree that they should keep their information private when they see intimate details about someone else (average = 4.18).

Meanwhile, among the boundary ownership items, the statement, "I don't immediately post on Facebook the recent things that happened to me because people might talk about it," has the highest average. Answers comprise the following: 48.8% strongly agree, 40.8% agree, 7.1% neutral, 2.7% disagree, and 1.4% strongly disagree. The next one is the statement, "If I think that information I posted looks too private, I might delete it," which has the following results: 44.1% strongly agree, 45.4% agree, 7.3% neutral, 2.2% disagree, and 1.0% strongly disagree. Then, the statement, "There are certain topics that I don't post on Facebook because I worry about the people who will see it," have these responses: 43.7% strongly agree, 42.6% agree, 9.3% neutral, 3.2% disagree. Moreover, the statement, "If I see intimate details about someone else, I think I should keep their information private," has the following replies: 41.8% strongly agree, 41.3% agree, 11.3% neutral, 3.8% disagree, and 2.0% strongly disagree. While the statement, "I only have little personal information on my Facebook," has these results: 33.8% strongly agree, 47.8% agree, 14.7% neutral, 3.2% disagree, and 0.6% strongly disagree.

The relationship between age and boundary ownership of private information in Facebook. Overall, there is a medium positive correlation between age and Boundary Ownership of Private Information on Facebook ($\rho = 0.37$). The higher the age, the higher the awareness and conscious effort in limiting what is being shared. Though all ages generally agree that they understand the extent of control they have over information, the ability increases as they get older.

Meanwhile, age has the strongest positive correlation in the statement, "There are certain topics that I don't post on Facebook because I worry about the people who are going to see it" ($\rho = 0.85$). This data means that as the age goes higher, they do not post certain topics on Facebook.

Aside from that, the statements "If I think that information I posted looks too private, I might delete it," and "I don't immediately post on Facebook the recent things that happened to me, because people might talk about it" have a medium positive correlation with age ($\rho = 0.65$; $\rho = 0.53$). These results mean that the higher the age, the more they agree that if they think the information they posted looks private, they might delete it and that they don't immediately post on Facebook the recent things that happened to them. Furthermore, compared to younger adolescents, older adolescents

are more likely to delete what they've posted if it looks private. They also don't immediately post on Facebook the recent things that happened to them because people might talk about it.

On the other hand, there is no correlation between age and adolescents' use of different names or aliases when discussing sensitive topics on Facebook so that others won't know their details. But there is a medium negative correlation between age and the statements, "If I see intimate details about someone else, I think I should keep their information private" ($\rho = -0.44$). Adolescents are between agreeing and strongly agreeing. As the age increases, the confidence that "if they see intimate details about someone else, they should keep the information private" lessens.

There is also a medium negative correlation between age and the statement, "I only have little personal information on my Facebook" ($\rho = -0.41$). As the age goes lower, the more they agree that they only have little information on Facebook. It can also mean that the younger adolescents are more concerned about limiting their personal information posted on Facebook. All the adolescents agree, except for the 18-year-old and 19-year-old adolescents, who are between "unsure" and "agree" that they have limited information on Facebook (average = 3.98; average = 3.63); 21% of 19-year-olds and 7% of 18-year-olds disagree that they have put only a little personal information on Facebook.

Boundary permeability of private information in Facebook. In general, adolescents are between what they do not know and are not comfortable sharing private information on Facebook (average = 2.71). They are between "undecided" and "disagree" in extensively sharing their private information. They want less information to be shared, so others will not know much about them. However, school experiences are easier to share than other information.

Adolescents don't want to share their day-to-day lives with people they don't know (average = 1.91). They are not comfortable posting and talking on Facebook about their problems (average = 2.29). They are undecided, and they do not agree to post intimate, personal things on their Facebook without hesitation (average = 2.51). They also do not update their Facebook posts and stories frequently (average = 2.68). On the other hand, they are undecided, and they like their Facebook posts and stories to be detailed (average = 3.28), but they like to discuss school concerns on Facebook (average = 3.60).

Furthermore, in the statement, "I share information on Facebook about my day-to-day life even with people whom I don't know," the responses are: 2.4% strongly agree, 6.3% agree, 12.7% neutral, 37.5% disagree, and 41.1% strongly disagree. Also, the statement, "I am comfortable posting and talking on Facebook about the problems that I face," has the following results: 4.5% strongly agree, 10.7% agree, 20.1% neutral, 36.6% disagree, and 28.1% strongly disagree.

While "I often post intimate, personal things on my Facebook without hesitation," the statement has these replies: 6.4% strongly agree, 16.9% agree, 21.5% neutral, 32.1% disagree, and 23.1% strongly disagree. And, the statement, "I update my Facebook posts or stories frequently," has the following responses: 4.3% strongly agree, 16.1% agree, 35.6% neutral, 29.6% disagree, and 14.3% strongly disagree. The results also showed: 13.0% strongly agree, 33.3% agree, 30.7% neutral, 15.5% disagree, and 7.6% strongly disagree, in the statement, "I like my Facebook posts and stories to be detailed." Lastly, the statement, "I like to discuss school concerns on my Facebook," has the following responses: 19.1% strongly agree, 41.7% agree, 25.1% neutral, 8.7% disagree, and 5.4% strongly disagree.

The relationship between age and boundary permeability of private information in Facebook. Overall, there is a weak negative correlation between age and the Boundary Permeability of Private Information on Facebook ($\rho = -0.22$). This data means that generally, adolescents are between “unsure” and “disagree”; however, the higher the age, the more they disagree that they are comfortable sharing private information publicly on Facebook. The higher the age, the less information is shared.

There is a strong negative correlation between age and sharing detailed posts ($\rho = -0.85$). Though they are unsure of agreeing on this matter, as the age goes higher, they are uncertain that they like their Facebook posts and stories to be detailed. Younger adolescents like their posts and stories to be more detailed (average = 3.36) when compared to older adolescents (3.20).

There is also a medium negative correlation between age and being comfortable posting intimate and personal matters ($\rho = -0.46$). As the age goes higher, they disagree more in posting intimate, personal things on their Facebook without hesitation. So, younger adolescents hesitate less in posting personal things (average = 2.59) than the older adolescents (average = 2.44). Meanwhile, the 10-12-year-old adolescents post more without hesitation (average = 2.63).

Moreover, there is a weak negative correlation between age and updating Facebook posts regularly ($\rho = -0.25$). Adolescents are unsure to disagreeing in sharing personal information, and as the age goes higher the more they disagree in updating their Facebook posts and stories frequently. Younger adolescents (average = 2.72) are more reluctant to update their Facebook posts and stories frequently than older adolescents (average = 2.63).

On the other hand, age has a weak positive correlation with talking about school concerns on Facebook ($\rho = 0.21$). This connotes that though adolescents are unsure to agree, as the age goes higher the more, they agree that they want to talk about school concerns on Facebook.

There is also a medium positive correlation between age and the sharing of personal information to people they don't know ($\rho = 0.52$). Adolescents are between strongly disagree to disagree, but as the age goes higher, their disagreement lessens. Younger adolescents disagree more (average = 1.85) than older adolescents (1.95).

Meanwhile, age does not correlate with the comfort level of adolescents in posting and talking on Facebook about the problems they face.

Boundary linkages of private information in Facebook. In general, adolescents are undecided, and they do not want to build connections on Facebook with people they do not know (average = 2.48). They are hesitant and unsure that they want to build the linkage with the people they do not know.

They are between “undecided” and “disagree” in putting their personal information and interest on Facebook in public mode to find friends (average = 2.79). They certainly do not comment on others' Facebook posts or stories to have them check out their profile (average = 1.88). They also do not accept friend requests from anyone (average = 2.01). Though, their names are publicly searchable on Facebook (average = 3.25).

Furthermore, there replies to the statement, “I put my personal information and interest on Facebook on public mode to let the people know me, so I can find friends,” are: 6.6% strongly agree, 22.2% agree, 24.1% neutral, 31.1% disagree, and 16.1% strongly disagree. Additionally, the statement, “I accept friend requests from anyone,” has the following replies: 1.7% strongly agree, 6.0% agree, 15.7% neutral, 40.6% disagree, and 36.0% strongly disagree. And, the statement, “I comment on other

Facebook posts or stories to have others check out my Facebook,” has the following answers: 1.3% strongly agree, 4.4% agree, 11.3% neutral, 44.5% disagree, and 38.5% strongly disagree. Lastly, the responses to the statement, “I am publicly searchable on Facebook and web search engine using my name,” are: 7.6% strongly agree, 35.9% agree, 31.4% neutral, 18.0% disagree, and 7.1% strongly disagree.

The relationship between age and boundary linkages of private information in Facebook. Overall, there is a medium positive correlation between age and Boundary Linkages of Private Information on Facebook ($\rho = 0.50$) which means as the age goes lower the more, they disagree that they want to build connections in Facebook among people that they do not know (average = 2.48). As the age increases, the more they consider building the linkage with the people they do not know; however, there is still hesitation in doing so.

There is also a strong positive correlation between age and accepting friend requests from anyone ($\rho = 0.71$). Though generally, adolescents do not agree in accepting friend requests from anyone, as the age goes lower, the more they strongly disagree in accepting friend requests from anyone (average = 2.01).

Meanwhile, a medium positive correlation exists between age and being publicly searchable on Facebook and web search engines using their name ($\rho = 0.55$). Though generally, adolescents are neutral and agree, as the age goes higher, the more their indecision lessens that they are publicly searchable on Facebook.

Also, a medium positive correlation is observed between age and inputting their personal information and interest on Facebook in public mode to find friends ($\rho = 0.44$). This data means that as the age goes lower, the more they do not agree that they put their personal information and interest on Facebook to have friends. Though as the age goes higher, the more they consider putting their personal information and interest on Facebook in public mode to find friends, the respondents are unsure about it.

On the other hand, there is a weak negative correlation between age, and they comment on other Facebook posts or stories to check out their profile ($\rho = -0.13$). This data means that as the age increases, the more they strongly disagree that they comment on other Facebook posts or stories to check out their profile (average = 1.88).

How adolescents manage their online privacy in Facebook. The results of the survey confirm that adolescents agree that they can manage their online privacy on Facebook, but with hesitation (average = 3.42). However, they are unsure of their perceived ability and practices to maintain and coordinate their privacy boundaries on Facebook (average = 3.14).

In particular, they perceived that they could control their private information on Facebook (average = 4.28), and they consciously limit what is being shared on Facebook (average = 4.22). On the other hand, they are hesitant and comfortable to build connections on Facebook with people they do not know (average = 2.84) and share private information on Facebook (average = 2.71).

Moreover, there is a weak correlation between age and adolescents' online privacy on Facebook ($\rho = 0.20$). So, as the age goes higher, the more they are confident that they can manage their online privacy. But their perceived ability and practices remain low. Meanwhile, as the age goes down, they are more unsure that they can manage their online privacy on Facebook.

Additionally, there is a weak negative correlation between age and the perceived ability and practices to maintain and coordinate their privacy boundaries ($\rho = -0.16$). Though adolescents are between unsure and agree that they know how to manage their privacy boundaries, they become more uncertain about it as age increases.

The relationship between privacy risk perception and how the adolescents manage their online privacy in Facebook. There is a strong positive correlation between privacy risk perception and how adolescents manage their online privacy on Facebook ($\rho = 0.83$). The higher the privacy risk perception, the higher the ability to manage one's online privacy on Facebook. On the other hand, there is a medium positive correlation ($\rho = 0.66$) between privacy risk perception related to privacy boundaries and the perceived ability and practices to maintain and coordinate privacy boundaries on Facebook.

Furthermore, there is a strong positive correlation between all privacy risk perception statements and the control of private information statements ($\rho = 0.84$), and the boundary ownership statements ($\rho = 0.94$). In contrast, there is a strong negative correlation between all privacy risk perception statements and the boundary permeability statements ($\rho = -0.83$) and a medium negative correlation with the boundary linkages statement ($\rho = -0.33$).

Moreover, the higher the risk perception, the higher the ability to control what they do on Facebook ($\rho = 0.41$) and choose whom to accept as friends on Facebook ($\rho = 0.82$). Meanwhile the statement, "It is dangerous to put plenty of personal information on your Facebook account," has a very weak negative correlation ($\rho = -0.03$) with the statement, "I have put little personal information on my Facebook," hence, there is no significant relationship between the two.

As the risk goes higher, the more they disagree that they are comfortable posting and sharing the problems they face on Facebook ($\rho = -0.56$). As the risk goes higher the more they disagree that they share their everyday lives on Facebook, with the people they don't know ($\rho = -0.58$)

Additionally, as the perceived risk goes higher, the more they do not put their personal information on public ($\rho = -0.11$). Also, as the perceived risk goes higher, they are more unsure about publicly searchable on Facebook and web search engines using their name ($\rho = -0.10$), than agreeing that they are doing this.

Summary

Adolescents perceive the online privacy risks related to controlling private information and coordinating their boundaries on Facebook as risks. The higher the age, the higher the perceived risk to privacy, especially the risks related to private information sharing and boundaries.

They also believe they control their private information, activities, and what they do on Facebook. The higher the age, the higher the ability to control their Facebook account.

Moreover, they have the awareness and conscious effort to limit what is shared, especially on Facebook. The higher the age, the higher the awareness and conscious effort in limiting what is being shared.

However, they are between what they do not know and are not comfortable sharing private information on Facebook. They are between “undecided” and “disagree” in extensively sharing their private information. They want less information to be shared, so others will not know much about them. However, school experiences are easier to share than other information. Adolescents are between “unsure” and “disagree”; however, the higher the age, the more they disagree that they are comfortable sharing private information publicly on Facebook.

They are also undecided, and they do not want to build connections on Facebook with people they do not know. They are hesitant and unsure that they want to build the linkage with the people they do not know. As the age goes lower the more, they disagree that they want to build connections in Facebook among people that they do not know. As the age increases, the more they consider building the linkage with the people they do not know; however, there is still hesitation in doing so.

In general, adolescents agree that they can manage their online privacy on Facebook, but with hesitation. However, they are unsure of their perceived ability and practices to maintain and coordinate their privacy boundaries on Facebook.

Conclusion

Adolescents perceive the following as online privacy risks on Facebook: putting much personal information, not having control over their accounts, accepting friend requests from people they don't know, sharing their day-to-day life to the people that they don't personally know, putting their personal information and interests publicly for the sake of being known and having friends and posting and talking about personal problems. Meanwhile, they are between unsure and agree that being publicly searchable on Facebook is dangerous.

Additionally, they can manage their online privacy on Facebook, but they are not confident with their perceived ability to maintain and coordinate their privacy boundaries. Precisely, they can control their private information and consciously limit what is being shared on their Facebook accounts. They are also careful in sharing their private information with people they don't know; hence, they share less information, except school-related. They are also cautious in connecting and building linkage with people they don't know. In addition, they use their Facebook to connect with friends whom they know.

Furthermore, there is a significant relationship between age and the privacy risk perception of adolescents, which means the higher the age, the higher the risk reception. And, the relationship is more extensive to the perceived risks related to Communication Privacy Management (i.e., boundary ownership, boundary permeability, and boundary linkages) or to the ability to maintain and coordinate their privacy boundaries.

Though all ages generally agree or are aware of the risks, the level of awareness increases as they get older. Specifically, this applies to posting and talking about personal problems, sharing about their day-to-day life with people that they don't personally know, making personal information and interests public on Facebook for the sake of being known and having friends, putting much personal information, and being publicly searchable. On the contrary, as the age goes lower, the more they agree that being able to control lessens the risks and that accepting friend requests from people you don't know is dangerous.

There is also a significant relationship between age and how adolescents manage their online privacy on Facebook. So, as the age goes higher, they become more confident that they can manage their online privacy. However, this is the opposite in coordinating their privacy boundaries. As the age goes higher, the more they are unsure of their perceived ability and practices to maintain and coordinate their privacy boundaries on Facebook.

In particular, though all ages generally agree that they can control their private information on Facebook, the ability increases as they get older. The higher the age, the higher the awareness and conscious effort in limiting what is being shared. The higher the age, the less information is shared. On the other hand, as the age goes lower, the more they disagree that they want to build connections on Facebook among people that they do not know.

There is also a significant relationship between online privacy management as perceived and practiced by adolescents and their privacy risks perception. The higher the privacy risk perception, the higher the ability to manage one's online privacy on Facebook and maintain and coordinate privacy boundaries.

Recommendations

Though adolescents can manage their online privacy on Facebook, their perceived ability and practices may not be sufficient to protect themselves against cybercrimes. Also, they are not confident with their perceived ability to maintain and coordinate their privacy boundaries. Hence, developing their digital and online literacy capacity is recommended, including online privacy risks, especially for younger adolescents.

The study also found that adolescents use Facebook for school purposes, even those below 13 years old. It would be better if there were regulations to reduce the vulnerability of the students, especially the younger adolescents.

Furthermore, the study is focused on the online privacy practices and risk perception of adolescents. Further research is recommended to determine the motivations or reasons behind these practices.

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APPENDICES

ANNEX A

The Survey Questionnaire

Online Privacy Literacy on Facebook ISANG SURVEY

Maraming salamat sa pagpayag na maging bahagi ng survey na ito. Asahan mong ang iyong mga sagot ay 'confidential' at gagamitin lamang para sa aking research.

Sumasainyo,
Sarah Jane Biton

Instruksyon:

Paki-sagutan ang mga sumusunod na katanungan. Maging 'honest' sa pagsagot ng mga tanong. Hindi nito maapektuhan ang iyong grado sa eskwela.

Part 1 - Pagpapakilala

Nickname o Alias	
Pangalan ng iyong Paaralan (Name of School)	
Grade Level	
Edad (Age)	
Kasarian (Sex)	

1. Ikaw ba ay nasa modular class o nasa online class? Pumili ng isa.

<input type="checkbox"/>	Ako ay nasa modular class
<input type="checkbox"/>	Ako ay nasa online class

2. Gumagamit ka ba ng Facebook?

<input type="checkbox"/> Oo	Kung sagot mo ay "Oo," magpatuloy sa susunod na tanong.
<input type="checkbox"/> Hindi	Kung sagot mo ay "Hindi," huwag ng magtuloy sa pagsagot.

3. Mayroong ka bang sariling Facebook account?

<input type="checkbox"/> Mayroon	
<input type="checkbox"/> Wala	Kung sagot mo ay "Wala," kaninong social media account ang ginagamit mo? _____

4. Ilang **oras bawat araw** ang ginugugol mo sa paggamit ng Facebook?

<input type="checkbox"/>	Mababa sa 1 oras bawat araw
<input type="checkbox"/>	1 – 2 oras bawat araw
<input type="checkbox"/>	2 – 3 oras bawat araw

	3 – 4 oras bawat araw
	5 oras at higit pa, bawat araw

Part 2. Sang-ayon ka ba o hindi?

Sa bahaging ito, walang tama o maling sagot. Nais lang naming malaman kung ikaw ay sumasang-ayon o hindi sa nilalahad ng bawat pangungusap. Ito ay tungkol sa iyong mga activities sa Facebook.

Instruksyon:

Basahin ang bawat pangungusap. Piliin ang:

“Strongly Agree” kung ikaw ay **LUBOS na sumasang-ayon** dito

“Agree” kung ikaw ay **sumasang-ayon** sa sinasabi ng pangungusap.

“Neutral” kung ikaw ay hindi sigurado o hindi makapagdesisyon.

“Disagree” kung ikaw ay **hindi sumasang-ayon** sa sinasabi ng pangungusap.

A. Control of Private Information on Facebook

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Kaya kong kontrolin ang mga ginagawa ko sa Facebook sa tamang paraan.					
2. Napipili ko sino ang tatanggapin kong friend request sa Facebook.					
3. Alam ko kung paano gamitin ang Facebook account ko.					
4. Ako lang ang nagdedesisyon kung sino ang kakausapin ko sa Facebook.					
5. May kakayahan akong baguhin ang privacy settings ko sa Facebook.					
6. Nagpo-post ako sa Facebook kapag gusto ko lamang.					

B. Boundary Ownership of Private Information on Facebook

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
7. Kaunti lang ang nakalagay sa Facebook ko na mga personal na impormasyon.					
8. Gumagamit ako ng ibang pangalan o alias sa Facebook para sa mga discussion ng mga sensitibong topic. Ginagawa ko ito, para hindi malaman ng ibang tao ang personal details ko.					

9. Kapag tingin kong masyadong personal at private ang na-post ko sa Facebook, pwede ko itong burahin.					
10. Hindi ako agad na nag-po-post sa Facebook ng mga nangyayari sa akin dahil baka pag-usapan ito ng ibang tao.					
11. May ilang mga topics ang hindi ko pino-post sa Facebook dahil nababahala ako sa mga makakita nito.					
12. Kapag nakakakita ako ng Facebook post tungkol sa mga intimate o personal na detalye ng ibang tao, naiisip kong hindi ko ito dapat na i-share.					

C. Boundary Permeability of Private Information on Facebook

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
13. Komportable akong i-post at pag-usapan sa Facebook ang mga problemang kinakaharap ko.					
14. Gusto kong detalyado ang mga posts at stories na nilalagay ko sa Facebook.					
15. Gusto kong pag-usapan sa Facebook ang mga bagay tungkol sa klase at eskwela.					
16. Madalas at hindi ako nag-aalinlangang i-post sa Facebook, ang mga personal na bagay tungkol sa akin.					
17. Nag-se-share ako sa mga taong hindi ko kilala sa Facebook, tungkol sa mga pang-araw-araw na nangyayari sa akin.					
18. Lagi akong nag-uupdate ng mga posts at stories ko sa Facebook.					

D. Boundary Linkages of Private Information on Facebook

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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19. Gumawa ako ng profile ko sa Facebook para maka-connect sa mga kaibigan ko.					
20. Naka-public ang mga personal kong impormasyon, para makilala ako ng mga tao at maging friends kami sa Facebook.					
21. Tinatanggap ko ang mga friend requests mula sa kahit sino.					
22. Nagko-comment ako sa mga posts o stories ng ibang tao sa Facebook upang tingnan nila ang aking profile.					
23. Pwedeng mahanap ang profile ko sa Facebook at ibang search engine gamit ang pangalan ko.					
24. Lagi akong nag-u-update ng mga nakaaliw at detalyadong post sa Facebook.					

E. Privacy Risk Perception

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
25. Ang pagkakaroon ko ng control sa Facebook ko ay nakababawas ng panganib na maaaring idulot nito.					
26. Mapanganib na tumanggap ng friend request mula sa mga hindi kakilala.					
27. Mapanganib maglagay ng maraming personal na impormasyon sa Facebook.					
28. Mapanganib sumali sa mga discussions sa Facebook tungkol sa mga sensitibong topic lalo na't gamit ang totoong pangalan at personal impormasyon.					
29. Mapanganib na i-post at pag-usapan sa Facebook ang mga personal na problemang kinakaharap.					
30. Mapanganib mag-share Facebook, at sa mga tanong hindi kilala ng mga pang-					

araw-araw na nangyayari sa sarili.					
31. Mapanganib na gawing public ang mga personal na impormasyon at mga interes sa Facebook para lamang makakilala ng ibang tao at maging friends.					
32. Ang pagiging searchable ng iyong pangalan sa Facebook at iba pang search engines ay delikado.					

Annex C

Questionnaire Development

A. Control of Private Information

Spiekermann, 2005	Yang et al., 2016	Adapted Statement (English)	Adapted Statement (Filipino)
I feel that I can steer the intelligent environment in a way I feel is right.	I feel I can steer my Twitter activity in a way I feel is right.	I can control my Facebook activity in a right way.	Kaya kong kontrolin ang mga ginagawa ko sa Facebook sa tamang paraan.
Thanks to Privacy Enhancing Technology (PET), electronic environment and its reading devices will have to subdue to my will.	I determine who I follow.	I determine who I accept as friend on Facebook.	Napipili ko sino ang tatanggapin kong friend request sa Facebook.
Due to PET, I perceive perfect control over the activity of my chips.	I have perfect control of my Twitter account.	I know how to use my Facebook account	Alam ko kung paano gamitin ang Facebook account ko.
Thanks to PET, I could determine myself whether or not I'll interact with the intelligent environment.	I determine for myself who I interact with.	I determine for myself who I interact with on Facebook.	Ako lang ang nagdedesisyon kung sino ang kakausapin ko sa Facebook.
Through PET, services are put at	I have the choice to interact with other users.	Redundant	

my disposition when I want them.			
I could imagine that if the electronic environment set out to scan me, it would be able to do so despite the PET.		Not applicable	
PET will finally not be able to effectively protect me from being read by the electronic environment.		Not applicable	
Due to it is still my decision whether or not the intelligent environment recognizes me.	I have the choice to change my privacy settings.	I know how to change my privacy settings in Facebook	May kakayahan akong baguhin ang privacy settings ko sa Facebook.
Through I finally have the choice whether or not I am being scanned or not	I tweet when I want.	I only post on Facebook when I want.	Nagpo-post ako sa Facebook kapag gusto ko lamang.
	I have limited personal information on my Twitter.	Redundant	
Through I would always be informed of whether and in what form the electronic environment recognizes me		Not applicable	
Using I would always know when and by whom I have been read out		Not applicable	

B. Boundary Ownership of Private Information

Child et al., 2009	Adapted Statement (English)	Adapted Statement (Filipino)
I have limited the personal information posted on my blog.	I only have little personal information on my Facebook.	Kaunti lang ang nakalagay sa Facebook ko na mga personal na impormasyon.
I use shorthand (e.g., pseudonyms or limited details) when discussing sensitive information so others have limited access to know my personal information.	I use a different name or alias when I discuss sensitive topics on Facebook so others won't know my personal details.	Gumagamit ako ng ibang pangalan o alias sa Facebook para sa mga discussion ng mga sensitibong topic. Ginagawa ko ito, para hindi malaman ng ibang tao ang personal details ko.
If I think that information I posted really looks too private, I might delete it.	If I think that information, I posted really looks too private, I might delete it.	Kapag tingin kong masyadong personal at private ang na-post ko sa Facebook, pwede ko itong burahin.
I usually am slow to talk about recent events because people might talk.	I don't immediately post on Facebook the recent things that happened to me, because people might talk about it.	Hindi ako agad na nag-po-post sa Facebook ng mga nangyayari sa akin dahil baka pag-usapan ito ng ibang tao.
I don't blog about certain topics because I worry who has access.	There are certain topics that I don't post on Facebook because I worry about the people who's going to see it.	May ilang mga topics ang hindi ko pino-post sa Facebook dahil nababahala ako sa mga makakita nito.
Seeing intimate details about someone else, makes me feel I should keep their information private.	If I see intimate details about someone else, I think I should keep their information private.	Kapag nakakakita ako ng Facebook post tungkol sa mga intimate o personal na detalye ng ibang tao, naiisip kong hindi ko ito dapat na i-share.

C. Boundary Permeability of Private Information

Child et al., 2009	Adapted Statement (English)	Adapted Statement (Filipino)
When I face challenges in my life, I feel comfortable talking about them on my blog	I am comfortable posting and talking in Facebook about the problems that I face	Komportable akong i-post at pag-usapan sa Facebook ang mga problemang kinakaharap ko.
I like my blog entries to be long and detailed.	I like my Facebook posts and stories to be detailed.	Gusto kong detalyado ang mga posts at stories na nilalagay ko sa Facebook.

I like to discuss work concerns on my blog	I like to discuss school concerns on my Facebook	Gusto kong pag-usapan sa Facebook ang mga bagay tungkol sa klase at eskwela.
I often tell intimate, personal things on my blog without hesitation.	I often post intimate, personal things on my Facebook without hesitation.	Madalas at hindi ako nag-aalinlangang i-post sa Facebook, ang mga personal na bagay tungkol sa akin.
I share information with people whom I don't know in my day-to-day life.	I share information on Facebook about my day-to-day life even with people whom I don't know	Nag-se-share ako sa Facebook, kahit na sa mga taong hindi ko kilala, tungkol sa mga pang-araw-araw na nangyayari sa akin.
I update my blog frequently.	I update my Facebook (via posts or stories) frequently.	Lagi akong nag-uupdate ng mga posts at stories ko sa Facebook.

D. Boundary Linkages of Private Information

Child et al., 2009	Adapted Statement (English)	Adapted Statement (Filipino)
I create a profile on my blog so that other bloggers can link to me with similar interests	I created my public profile so I can connect with my friends.	Gumawa ako ng profile ko sa Facebook para maka-connect sa mga kaibigan ko.
I try to let people know my best interest on my blog so I can find friends.	I put my personal information and interest on Facebook on public mode to let the people know me, so I can find friends.	Naka-public ang mga personal kong impormasyon at interests, para makilala ako ng mga tao at maging friends kami sa Facebook.
I allow people with a profile or picture I like to access my blog	I accept friend requests from anyone	Tinatanggap ko ang mga friend requests mula sa kahit sino.
I comment on blogs to have others check out my blog.	I comment on other Facebook posts or stories to have others check out my Facebook.	Nagko-comment ako sa mga posts o stories ng ibang tao sa Facebook upang tingnan nila ang aking profile.
I allow access of my blog through any of these: directories, key word searches, or weblog rings.	I am publicly searchable on Facebook and web search engine using my name	Pwedeng mahanap ang profile ko sa Facebook at ibang search engine gamit ang pangalan ko.
I regularly link to interesting websites to increase traffic on my blog.	I regularly update my Facebook with entertaining and detailed posts or stories.	Lagi akong nag-u-update ng mga nakaaliw at detalyadong post sa Facebook.

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E. Privacy Risk Perception

	Yang et al., 2016; Child et al., 2009	Adapted Statement (English)	Adapted Statement (Filipino)
Control of Private Information	I have perfect control of my Facebook account.	Having control over my Facebook lessens the danger that it could possibly cause.	Ang pagkakaroon ko ng kontrol sa Facebook ko ay nakababawas ng panganib na maaaring idulot nito.
	I determine who I accept as friend on Facebook.	It is dangerous to accept friend request from people you don't know.	Mapanganib na tumanggap ng friend request mula sa mga hindi kakilala.
Boundary Ownership of Private Information	I have limited the personal information posted on my Facebook.	It is dangerous to put many personal information on your Facebook account.	Mapanganib maglagay ng maraming personal na impormasyon sa Facebook.
	I use shorthand (e.g., pseudonyms) when discussing sensitive information on Facebook so others have limited access to know my personal information.	It is dangerous to join Facebook discussions about sensitive topics using your real name.	Mapanganib sumali sa mga discussions sa Facebook tungkol sa mga sensitibong topic lalo na't gamit ang totoong pangalan at personal impormasyon.
Boundary Permeability of Private Information	When I face challenges in my life, I feel comfortable talking about them on my Facebook	It is dangerous to post and talk about on Facebook, the personal problems you area facing.	Mapanganib na i-post at pag-usapan sa Facebook ang mga personal na problemang kinakaharap.
	I share information on Facebook about my day-to-day life even with people whom I don't know	It dangerous to share your day-to-day life to the people you don't know in Facebook.	Mapanganib mag-share sa mga tanong hindi kilala sa Facebook ng mga pang-araw-araw na nangyayari sa sarili.
Boundary Linkages of Private Information	I create a public profile my Facebook so that other Facebook users with similar interests can contact me.	Making my Facebook profile public, so that other Facebook users with similar interests can contact me is dangerous.	Mapanganib na gawing public ang mga personal na impormasyon at mga interes sa Facebook para lamang makakilala ng ibang tao at maging friends.

	I am publicly searchable on Facebook and web search engine using my name.	Being publicly searchable on Facebook and web search engine using my name is dangerous.	Ang pagiging searchable ng iyong pangalan sa Facebook at iba pang search engines ay delikado.
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Annex D
List of Tables

Table 1. Number of class sections and the sample sections

Grade Level	Number of Sections	Total No. of Students	Sections (50%)	Students (50%)
Grade 5	24	1056	12	528
Grade 6	24	1084	12	542
Grade 7	49	1819	25	909
Grade 8	48	1854	24	927
Grade 9	48	1884	24	942
Grade 10	43	1539	22	769
Grade 11	18	1005	9	502
Grade 12	16	725	8	362
TOTAL	270	10966	135	5481

Table 2. Valid responses received

Grade Level	Target Respondents		Valid Responses		Response Rate	
	Sections	Students	Sections	Students	Sections	Students
5	12	523	10	235	83%	45%
6	12	548	7	217	58%	40%
7	25	938	19	268	76%	29%
8	24	915	19	307	79%	34%
9	24	942	20	318	83%	34%
10	22	800	14	236	64%	30%
11	9	535	9	132	100%	25%
Total	128	5201	98	1713	76.6%	32.9%

Table 3. Responses received based on age

Age	Frequency	Percent
10 years old	56	3.3%
11 years old	196	11.4%
12 years old	229	13.4%
13 years old	262	15.3%
14 years old	257	15.0%

15 years old	270	15.8%
16 years old	212	12.4%
17 years old	155	9.0%
18 years old	57	3.3%
19 years old	19	1.1%
Total	1713	100%

Table 4. Privacy Risk Perception

Statements	Age of the Respondents									
	10	11	12	13	14	15	16	17	18	19
25. Having control over my Facebook lessens the danger that it could possibly cause.	4.27	4.27	4.15	4.17	4.29	4.43	4.25	4.31	4.16	4.11
26. It is dangerous to accept friend request from people you don't know.	4.24	4.17	4.14	4.14	4.15	4.22	4.17	4.22	4.23	4.00
27. It is dangerous to put many personal information on your Facebook account.	4.16	4.19	4.17	4.19	4.34	4.48	4.34	4.40	4.16	4.42
28. It is dangerous to join Facebook discussions about sensitive topics using your real name.	4.31	4.15	4.20	4.22	4.37	4.42	4.40	4.37	4.28	4.42
29. It is dangerous to post and talk about on	3.91	4.01	4.03	4.03	4.10	4.13	4.13	4.34	4.25	4.05

Facebook, the personal problems you area facing.										
30. It dangerous to share your day-to-day life to the people you don't know in Facebook.	4.22	4.10	4.04	4.07	4.23	4.23	4.20	4.34	4.23	4.05
31. Making my Facebook profile public, so that other Facebook users with similar interests can contact me is dangerous.	4.07	4.05	4.00	4.01	4.20	4.19	4.17	4.32	4.12	4.16
32. Being publicly searchable on Facebook and web search engine using my name is dangerous.	3.58	3.69	3.63	3.74	3.76	3.65	3.74	3.61	3.74	3.68
AVERAGE	4.10	4.08	4.04	4.07	4.18	4.22	4.18	4.24	4.14	4.11
AVERAGE (#28 not included)	4.06	4.07	4.02	4.05	4.15	4.19	4.14	4.22	4.13	4.07

Table 5. Privacy Risk Perception's Average and Correlation with Age

Statements	Average	Correlation Coefficient
25. Having control over my Facebook lessens the danger that it could possibly cause.	4.24	-0.21
26. It is dangerous to accept friend request from people you don't know.	4.17	-0.30

27. It is dangerous to put many personal information on your Facebook account.	4.29	0.57
28. It is dangerous to join Facebook discussions about sensitive topics using your real name.	4.31	0.64
29. It is dangerous to post and talk about on Facebook, the personal problems you area facing.	4.10	0.72
30. It dangerous to share your day-to-day life to the people you don't know in Facebook.	4.17	0.24
31. Making my Facebook profile public, so that other Facebook users with similar interests can contact me is dangerous.	4.13	0.62
32. Being publicly searchable on Facebook and web search engine using my name is dangerous.	3.68	0.32
AVERAGE	4.14	0.54
AVERAGE (#4 not included)	4.11	0.48

Table 6. Control of Private Information

Statements	Age of the Respondents									
	10	11	12	13	14	15	16	17	18	19
1. I can control my Facebook activity in a right way.	4.49	4.37	4.39	4.32	4.40	4.50	4.46	4.44	4.56	4.32
2. I determine who I accept as friend on Facebook.	4.40	4.39	4.43	4.40	4.48	4.54	4.49	4.49	4.42	4.00
3. I know how to use my Facebook account	4.45	4.39	4.39	4.46	4.55	4.61	4.58	4.58	4.49	4.32

4. I determine for myself who I interact with on Facebook.	3.71	3.57	3.65	3.87	4.05	4.21	4.27	4.39	4.42	4.21
5. I have the capacity to change my privacy settings in Facebook	3.80	3.80	3.97	4.23	4.36	4.50	4.42	4.46	4.46	4.32
6. I only post on Facebook when I want.	3.73	3.79	3.91	3.98	4.05	4.24	4.38	4.36	4.26	4.26
AVERAGE	4.10	4.05	4.12	4.21	4.31	4.43	4.43	4.45	4.44	4.24

Table 7. Control of Private Information Average and Correlation with Age

Statements	Average	Correlation Coefficient
1. I can control my Facebook activity in a right way.	4.43	0.12
2. I determine who I accept as friend on Facebook.	4.40	-0.33
3. I know how to use my Facebook account	4.48	0.15
4. I determine for myself who I interact with on Facebook.	4.04	0.91
5. I have the capacity to change my privacy settings in Facebook	4.23	0.83
6. I only post on Facebook when I want.	4.10	0.91
AVERAGE	4.28	0.75

Table 8. Boundary Ownership of Private Information

Statements	Age of the Respondents									
	10	11	12	13	14	15	16	17	18	19
7. I have put few personal information on my Facebook.	4.05	4.12	4.06	4.03	4.19	4.13	4.12	4.23	3.98	3.63
8. I use a different name or alias when I discuss sensitive topics on Facebook so others won't know my personal details.	2.42	2.43	2.52	2.43	2.44	2.42	2.33	2.45	2.32	2.58
9. If I think that information, I posted really looks too private, I might delete it.	4.25	4.26	4.16	4.24	4.36	4.39	4.30	4.34	4.32	4.37
10. I don't immediately post on Facebook the recent things that happened to me, because people might talk about it.	4.16	4.20	4.25	4.30	4.26	4.39	4.42	4.45	4.51	4.16

11. There are certain topics that I don't post on Facebook because I worry about the people who's going to see it.	4.05	4.17	4.15	4.14	4.26	4.29	4.34	4.44	4.30	4.32
12. If I see intimate details about someone else, I think I should keep their information private.	4.29	4.20	4.12	4.21	4.21	4.21	4.17	4.01	4.14	4.21
AVERAGE	3.87	3.90	3.88	3.89	3.95	3.97	3.95	3.99	3.93	3.88
AVERAGE (#8 not included)	4.16	4.19	4.15	4.18	4.25	4.28	4.27	4.29	4.25	4.14

Table 9. Boundary Ownership of Private Information Average and Correlation with Age

Statements	Average	Correlation Coefficient
7. I have put few personal information on my Facebook.	4.06	-0.41
8. I use a different name or alias when I discuss sensitive topics on Facebook so others won't know my personal details.	2.43	0
9. If I think that information, I posted really looks too private, I might delete it.	4.30	0.65
10. I don't immediately post on Facebook the recent things that happened to me, because people might talk about it.	4.31	0.53
11. There are certain topics that I don't post on Facebook because I worry about the people who's going to see it.	4.25	0.85

12. If I see intimate details about someone else, I think I should keep their information private.	4.18	-0.44
AVERAGE	4.22	0.37
AVERAGE (#8 not included)	3.92	0.43

Table 10. Boundary Permeability of Private Information

Statements	Age of the Respondents									
	10	11	12	13	14	15	16	17	18	19
13. I am comfortable posting and talking in Facebook about the problems that I face	2.33	3.75	3.59	3.65	3.73	3.84	3.83	3.82	3.98	4.11
14. I like my Facebook posts and stories to be detailed.	3.40	2.63	2.58	2.63	2.73	2.82	2.67	2.83	2.95	2.89
15. I like to discuss school concerns on my Facebook	2.60	3.75	3.59	3.65	3.73	3.84	3.83	3.82	3.98	4.11
16. I often post intimate, personal things on my Facebook without hesitation.	2.33	3.75	3.59	3.65	3.73	3.84	3.83	3.82	3.98	4.11

17. I share information on Facebook about my day-to-day life even with people whom I don't know	2.33	3.75	3.59	3.65	3.73	3.84	3.83	3.82	3.98	4.11
18. I update my Facebook (via posts or stories) frequently.	2.33	3.75	3.59	3.65	3.73	3.84	3.83	3.82	3.98	4.11
AVERAGE	2.55	3.57	3.42	3.48	3.56	3.67	3.64	3.65	3.81	3.90

Table 11. Boundary Permeability of Private Information Average and Correlation with Age

Statements	Average	Correlation Coefficient
13. I am comfortable posting and talking in Facebook about the problems that I face	3.66	0.72
14. I like my Facebook posts and stories to be detailed.	2.81	-0.07
15. I like to discuss school concerns on my Facebook	3.69	0.76
16. I often post intimate, personal things on my Facebook without hesitation.	3.66	0.72
17. I share information on Facebook about my day-to-day life even with people whom I don't know	3.66	0.72
18. I update my Facebook (via posts or stories) frequently.	3.66	0.72
AVERAGE	3.53	0.77

Table 12. Boundary Linkages of Private Information

Statements	Age of the Respondents									
	10	11	12	13	14	15	16	17	18	19
19. I created my public profile so I can connect with my friends.	4.00	3.95	3.87	3.94	4.04	4.00	4.04	4.25	4.14	4.11
20. I put my personal information and interest on Facebook on public mode to let the people know me, so I can find friends.	2.76	2.88	2.78	2.74	2.58	2.57	2.65	2.81	3.02	3.16
21. I accept friend requests from anyone	1.67	1.99	2.00	1.96	1.96	1.85	2.04	1.99	2.09	2.58
22. I comment on other Facebook posts or stories to have others check out my Facebook.	1.85	2.08	1.98	1.91	1.82	1.71	1.72	1.77	1.79	2.16
23. I am publicly searchable on Facebook and web search engine using my name	3.22	3.24	3.06	3.17	3.12	3.21	3.23	3.29	3.16	3.79
24. I regularly update my Facebook	2.98	3.04	3.04	2.96	2.95	2.99	3.05	3.12	3.12	3.42

with entertaining and detailed posts or stories.										
AVERAGE	2.75	2.86	2.79	2.78	2.75	2.72	2.79	2.87	2.89	3.20
AVERAGE (#19 & 24 not included)	2.38	2.55	2.45	2.45	2.37	2.34	2.41	2.46	2.51	2.92

Table 13. Boundary Linkages of Private Information Average and Correlation with Age

Statements	Average	Correlation Coefficient
19. I created my public profile so I can connect with my friends.	4.03	0.74
20. I put my personal information and interest on Facebook on public mode to let the people know me, so I can find friends.	2.79	0.44
21. I accept friend requests from anyone	2.01	0.71
22. I comment on other Facebook posts or stories to have others check out my Facebook.	1.88	-0.13
23. I am publicly searchable on Facebook and web search engine using my name	3.25	0.55
24. I regularly update my Facebook with entertaining and detailed posts or stories.	3.07	0.70
AVERAGE	2.84	0.61
AVERAGE (#19 & 24 not included)	2.48	0.50

Table 14. How adolescents manage their private information on Facebook

Statements	Age of the Respondents									
	10	11	12	13	14	15	16	17	18	19

A. Control of Private Information on Facebook	4.10	4.05	4.12	4.21	4.31	4.43	4.43	4.45	4.44	4.24
B. Boundary Ownership of Private Information on Facebook	4.16	4.19	4.15	4.18	4.25	4.28	4.27	4.29	4.25	4.14
C. Boundary Permeability of Private Information on Facebook *	3.30	3.19	3.22	3.24	3.35	3.35	3.29	3.43	3.35	3.16
D. Boundary Linkages of Private Information on Facebook *	3.62	3.45	3.55	3.55	3.63	3.66	3.59	3.54	3.49	3.08
AVERAGE	3.80	3.72	3.76	3.80	3.89	3.93	3.90	3.93	3.88	3.65
AVERAGE - CPM Only	3.70	3.61	3.64	3.66	3.74	3.77	3.72	3.75	3.70	3.46

*Statement in negative form, so the average has been reversed.

Table 15. Online Privacy Management Average and Correlation with Age

Statements	Average	Correlation Coefficient
A. Control of Private Information on Facebook	4.28	0.75
B. Boundary Ownership of Private Information on Facebook	4.22	0.37
C. Boundary Permeability of Private Information on Facebook*	3.29	0.22
D. Boundary Linkages of Private Information on Facebook*	3.52	-0.50
AVERAGE	3.83	0.20

AVERAGE (B, C, D only)

3.67

-0.16

*Statement in negative form, so the average has been reversed.

Table 16. Privacy Risk Perception versus Online Privacy Management

	Age of the Respondents										Correlation Coefficient
	10	11	12	13	14	15	16	17	18	19	
Privacy Risk Perception Average	4.06	4.07	4.02	4.05	4.15	4.19	4.14	4.22	4.13	4.07	
A. Control of Private Information on Facebook	4.10	4.05	4.12	4.21	4.31	4.43	4.43	4.45	4.44	4.24	0.84
B. Boundary Ownership of Private Information on Facebook	4.16	4.19	4.15	4.18	4.25	4.28	4.27	4.29	4.25	4.14	0.94
C. Boundary Permeability of Private Information on Facebook*	3.30	3.19	3.22	3.24	3.35	3.35	3.29	3.43	3.35	3.16	0.83
D. Boundary Linkages of Private Information on Facebook*	3.62	3.45	3.55	3.55	3.63	3.66	3.59	3.54	3.49	3.08	0.33
Online Privacy Mgt	3.33	3.40	3.38	3.40	3.40	3.43	3.46	3.45	3.46	3.53	0.83
Comm. Privacy Mgt (B, C, D only)	3.08	3.18	3.13	3.13	3.09	3.09	3.13	3.11	3.14	3.30	0.66

*Statement in negative form, so the average has been reversed.