Media Exposure Behaviors Affecting the Utilization of Twitter Among Teenage and Working-age Individuals in Chiang Mai Province *

Suphanit Chansongt[**]

Received: 01/06/22
Revised: No.1: 11/05/23
Accepted: 20/06/23

Abstract

This study aimed 1) to investigate the utilization of Twitter in teenage and working-age individuals; 2) to compare levels of knowledge of using Twitter and media exposure behaviors in utilizing Twitter; and 3) to study the relationship between demographic characteristics of Twitter media usage behavior, knowledge level of the sample group and utilization of Twitter. This study employed a mixed-methods approach, combining quantitative and qualitative data collection. In the quantitative part, data were collected from questionnaires administered to 400 respondents, comprising 200 teenage and 200 working-age individuals. In the qualitative part, data were collected from in-depth interviews with 20 participants, comprising ten teenage and ten working-age individuals. Interview data were then analyzed to supplement questionnaire data to ensure the completeness of answers to research questions. Results revealed that Most participants had a habit of using Twitter every day. The utility reasons included searching for

* This article is part of the research on "Media Exposure Behaviors Affecting the Utilization of Twitter Among Teenagers and Working-age Groups in Chiang Mai Province", which received funding from the Institution of Research and Development, Chiang Mai Rajabhat University

** M.A. (International Communication) Macquarie University, Sydney, Australia. (2003). Currently, is an Assistant Professor of the Bachelor of Communication Arts program, Faculty of Management Sciences, Chiang Mai Rajabhat University.

new knowledge ($\bar{x}$ = 4.16, SD=0.84) and receiving news ($\bar{x}$ = 3.97, SD=0.90), both rated high. Furthermore, based on demographic characteristics, those in the teenage group had a significantly higher knowledge of using Twitter ($\bar{x}$ = 7.515) than those in the working-age group (t-score=2.499) at the .05 level. On the contrary, the working-age individuals had significantly higher utilization of Twitter ($\bar{x}$ = 3.830) than the teenagers (t-score=-3.068) at the .05 level.

Keywords: Behavior, Utilization, Twitter, Teenager, Working-age, Individual

Introduction

It is undeniable that social networks have played a crucial role in human life. They have gained unrivaled popularity because users can conveniently and quickly reach one another through platforms. Furthermore, they serve as a space for those with common interests to share information and knowledge at a low communication cost. Nevertheless, studies on teenagers' behaviors in using the internet in the United States suggested that more frequent access to and use of the internet in daily life promoted the desire among teenagers to live in solitude, isolating from families (Kraut et al., 1998, as cited in Wang et al., 2005). Consequences of this aspiration included the risk of exposure to pornography and other inappropriate content and the chance for teenagers to innocently exchange communication with potentially dangerous strangers (Valentine & Holloway, 2001, as cited in Wang et al., 2005).

In 2017, Thailand ranked 15th in the top 20 countries with the highest number of Twitter users, with 5.7 million users. Furthermore, Twitter grew most rapidly in Thailand compared to nations in Southeast Asia. Although the number of Thai Twitter users is lower than in Indonesia and the Philippines, it has grown by 35% in the past two years (Matemate, 2016). Primary reasons for using Twitter include entertainment, leisure, and interest- based news (e.g., celebrities and politics). For instance, users used Twitter to subscribe to news when protesters were dispersed by tear gas while demanding General Prayut Chan-o-cha resign.

Furthermore, users also stay tuned to news about COVID-19 as infection figures are reported daily. Hence, Twitter has become another channel for mass communication. In addition, another fundamental reason contributing to the outstanding popularity of Twitter in Thailand is that most younger generations use social networks for conversations to avoid parents' detection. As more parents started using Facebook, several teenage and working-age individuals switched to Twitter (Wiboonyasake, 2018).

Data also confirm that Twitter has the highest growth rate of other social media platforms. Pnern Asavavipas, Chief Executive Officer of Onebit Matter Co., Ltd., mentioned the statistics of social media usage in Thailand by indicating that, in 2017, there were 47 million Thai Facebook users (15% growth), 11 million Thai Instagram users (41% growth), and 9 million Thai Twitter users (70% growth). This development was perceived to be the most attractive annual growth compared to 5.3 million users in the previous year. It was also projected that Thai Twitter users would exceed 9 million in 2017 and continue to grow in the subsequent year. Based on the notion that Twitter has a higher growth rate than other social media (Oongkhing, 2017), the researcher was keen to examine its utilization.

Another primary reason several users and organizations use hashtags on Twitter is that they can generate up to 50% short-term reach, and their tweets have a 40% chance for retweets and a 21% chance for reads and replies (Matichon Online, 2019, February 19). Additionally, according to Sakamoto (2015, as cited in Promdirake, 2015), over 15% of observed retweets contained hashtags. Factors contributing to the chance for retweeting were the inclusion of images, URLs (i.e., Uniform Resource Locator or addresses where information on the internet could be located), and hashtags. The most effective method to encourage retweeting was the use of images. Media exposure is another factor affecting communication that involves audiences. Soongsomsakul and Wattanaprapa (2019) reported that overall social network behaviors such as Twitter were rated as high. The top behaviors included checking on devices to access networks and using devices to communicate with others. Furthermore, the users would select social

networks first, followed by sharing opinions, feelings, and stories through activities such as commenting on a friend's or group post and using Twitter for urgent or quick communication.

Previous studies suggested that different media exposure behaviors contributed to different benefits. For instance, Chomjuntuek (2018) revealed that Twitter hashtag users from different demographic characteristics had different exposure behaviors to travel hashtags. Similarly, Chaiyasaeng and Fyeted (2013) investigated television news anchors' behaviors in using Twitter. They reported that the top objectives for the television news anchors to publicize information on Twitter were to provide news updates as frequently as possible by sharing their opinions and maintaining relationships with other Twitter users.

According to a statistical analysis of social media conducted in 2020 to identify primary user bases, 51% of Thai Twitter users were female, and 49% were male in 2019. However, the ratio changed drastically in 2020, where female users rose to 78%, whereas male users decreased to 21.90%. Furthermore, the top users based on age ranges were 16-24 years (40%), 25-34 years (26%), 35-44 years (19%), 45-54 years (11%), and 55-64 years (4%). From the figures, working-age individuals (i.e., 25-44 years) appeared to dominate the platform as the consolidated percentage takes up 45% of the entire users, making them the most active group on Twitter. Moreover, Thais also use Twitter for music (77%), movies (68%), food (68%), traveling (60%), gaming (57%), finance (57%), fashion (52%), and cars (51%) (Ad Addict T.H., 2020, February 19).

Martyn U'ren, the Research Director of Twitter's Asia-Pacific Region, disclosed data on the use of Twitter in Thailand. In collaboration with Circus Social, a behavioral study was conducted to review 500,000 tweets between January 1 and February 28, 2019, and the data indicated that Thai citizens watched more Thai TV shows and movies than those produced in foreign countries. Furthermore, Thai users tweeted their opinions in real time while watching a program. This phenomenon suggested a high level of engagement and presented opportunities

for brands wishing to effectively reach out to entertainment enthusiasts on Twitter (Junkisen, 2019).

An internet user behavior survey in 2019 explored areas and hours of internet usage and discovered that the North has the highest average time spent on the internet (10 hours 31 minutes), followed by the Northeast (10 hours 28 minutes), the Central and Bangkok (10 hours 19 minutes), and the South (10 hours and 17 minutes) (Electronic Transactions Development Agency, 2019). In terms of population, the North has 18 provinces with a total population of 12,119,572. Since Chiang Mai is the province with the largest population in the North, which is 1,779,254 (National Statistical Office of Thailand, 2019), it was selected as the spatial scope of this study, emphasizing teenage working-age individuals.

From the addressed significance, this study first investigated the utilization of Twitter in teenage and working-age individuals in Chiang Mai, justifying that they are the majority of Twitter users and have diverse reasons for using Twitter. Secondly, it also compared demographic characteristics, knowledge levels, and exposure behaviors in utilizing Twitter. Thirdly, it explored the influences of demographic characteristics, the levels of knowledge of using Twitter, and the media exposure behaviors in utilizing Twitter.

Objectives

1. To study the utilization of Twitter among teenagers and working people

2. To compare demographic characteristics, level of knowledge about using Twitter and media exposure behavior and utilization of Twitter

3. To study the relationship between demographic characteristics of Twitter media usage behavior, level of knowledge, and utilization of Twitter

4. To study the influence of demographic characteristics, level of knowledge about using Twitter, and media exposure behavior and utilization of Twitter

Hypothesis

1) Adolescents and working people had different levels of knowledge about using Twitter.

2) Adolescents and working-age groups have different behaviors in utilizing Twitter.

3) demographic characteristics of Twitter media usage behavior and knowledge level were correlated with Twitter utilization.

4) Behavior of exposure to Twitter media The level of knowledge about Twitter dramatically influences the utilization of Twitter.

Definition of term

Adolescents refer to the age group 18-24 years old who use Twitter.

Working age refers to the age group 25-44 years old who uses Twitter.

Level of knowledge about using Twitter refers to awareness and correct understanding of the content of the Computer Crime Act B.E. 2560 offense.

Taking advantage of Twitter refers to using it to benefit oneself, letting friends know their status, not losing contact with friends on Twitter, and using it to find new knowledge. Moreover, it is used to follow the news as a channel to contact the manufacturer of the product or service we use, ask for help in various matters, promote their work, and use it to find people who want to know.

Literature Reviews

Media exposure behaviors

Media exposure is a factor that affects communication. The concept is related to the audience's internal and external psychological factors, such as media accessibility. More specifically, it includes physical accessibility (e.g., a distance between an audience and news or

media), economic accessibility (e.g., whether the economic situation is favorable for news consumption), and sociocultural accessibility.

To measure media exposure behaviors, DeFleur & DeFleur (2022) recommended two indicators, including

1. media usage duration (i.e., measuring the length of time that an audience is exposed to media) and

2. media usage frequency (i.e., measuring how frequently an audience is exposed to media).

The concept of media exposure behavior suggests that, regardless of media, audiences tend to select and search for news based on needs and expectations, which vary from person to person. The same logic applies to teenage and working-age individuals who use Twitter for various purposes. Therefore, this study used the concept of media exposure behaviors as a conceptual framework to study teenage and working-age individuals by measuring frequencies, durations, and periods in which the users were exposed to Twitter. The study also examined whether their Twitter exposure behaviors affected the utilization of Twitter.

Twitter utilization

Twitter is a social media platform, and Rungpattanaphan (2012) described Twitter utilization as follows:

1. Statuses: Users can use Twitter to send information to followers in the form of statuses, which typically include an activity that the users are doing and where such activities occur. Followers subscribing to a Twitter account will receive status updates along with a specific piece of information.

2. New knowledge: When followers subscribe to a Twitter account, they can obtain new knowledge if the account owner posts knowledge as statuses and links to resources. Followers are also free to click such links to explore further.

3. News subscription: Twitter users may follow news reported as live statuses from other Twitter users who might be at a newsworthy event or scene. Furthermore, users can also follow and read news from CNN (e.g., via www.twitter.com/cnn or a shortened call sign of @CNN). Similarly, they may follow other news call signs, including @NYTimes, @BreakingNewsOn, @nprnews, @weirdnews, @MarsPhoenix, and @Astronautics.

4. Firm's contact channel: Several companies have official Twitter accounts that users can use to stay in touch. Users can use Twitter to file a complaint or ask a question. Examples of large companies with official Twitter accounts include Zappos, Starbucks, Whole Foods, and JetBlue.

5. Community support: Users may use Twitter to ask for help in the same way they use blogs and forums. Twitter is another practical platform that users can use to ask questions or ask for help if they wish to save time and effort looking for answers. A Twitter developer, Owen Wrinkle, stated that Problems generally require five minutes of thinking and might be solved through Twitter in ten seconds. However, the prerequisite of such an almost instant solution acquisition is to have a substantial number of followers, especially if they are real-life acquaintances. Furthermore, the users are suggested to follow their followers back to maximize the reciprocity in exchanging benefits.

6. Sharing products and websites: Twitter is a viable option for sharing and suggesting personal and non-personal work, products, and websites. However, it is suggested to consider the appropriateness when sharing links. Otherwise, followers might find such behavior annoying and stop their subscriptions.

7. People discovery: Twitter users are free to type in the search box names of famous and infamous individuals or anyone they wish to become acquainted with.

This study applied the concept of Twitter utilization to formulate criteria to investigate the ways teenage and working-age individuals in Chiang Mai utilize Twitter and examine factors affecting the use of Twitter.

Methodology

This mixed-methods study combined demographic characteristics, media exposure behaviors, and social media utilization into a conceptual framework for analysis. Quantitative data were collected from questionnaires administered in response to the research objectives. Further qualitative interviews were conducted to acquire additional details to ensure the completeness of the answers to the research questions.

For a quantitative research tool, the researcher used Questionnaires to measure Twitter utilization by dividing the question into four parts:

Part 1: General information of the respondents, namely gender, age, occupation, education level, and income of teenagers and working age groups, is in a checklist format.

Part 2: Questions about Twitter media usage behavior, a checklist format.

Part 3: Questions about Twitter media literacy. There is a yes or no question. There are ten questions to measure knowledge. If any question respondent answers correctly, 1 point will be given. If the respondent answers incorrectly, 0 points will be given.

Part 4: Questions about Take Advantage of Twitter It is a 5-point estimation scale question with only one answer to choose from.

Multi-stage sampling was employed as follows:

Step 1: Purposive sampling was used to select Chiang Mai.

Step 2: Two from 24 districts of Chiang Mai were selected, namely Muang Chiang Mai and San Pa Tong, because they contain the highest numbers of teenage and working-age individuals.

Step 3: Since the exact number of teenage and working-age Twitter users was not available, purposive sampling was employed in this step, following a sample size formula to select the 400 questionnaire respondents by collecting a group of 200 teenagers and 200 working people in the area with the condition that they must use Twitter.

The researcher pretested the questionnaire before actually using it by experimentally collecting data from 30 Twitter users and calculating the reliability coefficient with Cronbach's Alpha statistics. The reliability correlation coefficient was 0.92, more significant than 0.70, indicating that the measuring instrument was reliable before collecting data from a sample of 400 people. It also uses content validity methods. This can be done by finding the Index of Item - Objective Congruence (IOC), in which the researcher lets experts check the research questionnaire. The results of the questionnaire quality check in terms of content validity from 3experts found that all questions had a consistency index between question items and objectives. The content validity result has an IOC value greater than 0.5, which according to the criteria used to judge the validity of the content (Phanpinit, 2011), shows that all questions in the questionnaire are consistent with the objectives of this research. Therefore, the researcher can use the tools mentioned earlier to collect data.

Therefore, the researcher selected the sample using purposive sampling. The researcher selected the sample group by considering the characteristics that the researcher wanted to study: teenagers and working people living in Muang and San Pa Tong Districts in Chiang Mai Province. The data were collected from October 1, 2020 - August 31, 2021. Statistical data were analyzed with descriptive statistics using percentage, mean, standard deviation, Standard Deviation (S.D.), and inferential statistics, including t-test, Anova Correlation Analysis, and Regression.

Results

Demographic baselines

The participants generally have the following baselines in demographic characteristics: Firstly, there were more female participants (53.80%) than their male counterparts (46.30%). Most of them (58.50%) had a bachelor's degree or equivalent education. Regarding occupation, most participants (49.50%) were lower - and higher-

education students with no access to a source of income (38.20%). Most had been using Twitter for 1 - 3 years (37.00%). On usage frequency, most reportedly used Twitter every day (30.80%), with the most time spent on Twitter lower than an hour (42.30%) through smartphones, such as iPhones and Android phones (66.00%).

Twitter's usage behaviors

Most participants used Twitter for 1 - 3 years, followed by less than a year and over six years, respectively. Most use Twitter daily, with the most time spent on Twitter lower than an hour via smartphones, such as iPhones and Android phones.

1. Means and standard deviations of Twitter utilization by dimensions

Table 1 Means and standard deviations of Twitter utilization

Twitter utilization	$\bar{x}$	SD	Level
1) To let followers know about their status and to keep in touch with them on Twitter	3.58	0.97	High
2) To search for new knowledge from accounts followed	4.16	0.84	High
3) To subscribe to news	3.97	0.90	High
4) To use as a contact channel with companies that manufacture the products and provide the services employed	3.34	1.09	Moderate
5) To ask for help in various matters/to keep in touch with followers	3.46	1.09	High
6) To promote personal products/websites	3.60	1.13	High
7) To search for people and stories of interest	3.90	0.83	High
Total	3.71	0.97	High

According to Table 1, the total mean of Twitter utilization was high ($\bar{x}$ = 3.71, SD = 0.97). Dimensionally, the top reasons for utilizing Twitter were to search for new knowledge from accounts followed (rated as high, $\bar{x}$ = 4.16, SD = 0.84), followed by to subscribe to news (rated as high, $\bar{x}$ = 3.97, SD = 0.90), and use as a contact channel with companies that manufacture the products and provide the services employed (rated as moderate, $\bar{x}$ = 3.34, SD=1.09).

2. Comparing the difference in means of levels of knowledge about Twitter and the difference in means of Twitter utilization between the teenage and working-age individuals

Table 2 A comparative analysis of the difference in means of levels of knowledge about Twitter between teenage and working-age individuals (from a total score of ten)

Teenage individuals (n = 200)		Working-age individuals (n = 200)		T-test	Sig
$\bar{x}$	S.D.	$\bar{x}$	SD		
7.515	1.750	7.100	1.562	2.499	.013*

*At the p $\leq$ 0.05 statistical significance

According to Table 2, the teenage and working-age individuals had different means of knowledge about Twitter. More specifically, the teenage individuals had a significantly higher level of knowledge ($\bar{x}$ = 7.515) than those of the working - age group ($\bar{x}$ = 7.100), producing a t - score of 2.499 at the .05 level.

Table 3 A comparative analysis of the difference in means of Twitter utilization between the teenage and working-age individuals

Teenage individuals (n = 200)		Working-age individuals (n = 200)		T-test	Sig
$\overline{x}$	S.D.	$\overline{x}$	SD		
3.632	0.732	3.830	0.545	-3.068	.002*

*At the $p \leq 0.05$ statistical significance

According to Table 3, teenage and working-age individuals had different means of Twitter utilization. More specifically, the working-age individuals had a significantly higher Twitter utilization ($\overline{x} = 3.830$) than those in the teenage group ($\overline{x} = 3.632$), producing a t-score of -3.068 at the .05 level.

3. To show the relationship between demographic characteristics of Twitter media usage behavior, knowledge level of the sample group, and utilization of Twitter.

Table 4 A regression analysis to show a summary of the relationship between demographic characteristics, Twitter media usage behavior, knowledge level of the sample group, and utilization of Twitter.

Variable (Take advantage of Twitter)	r	Sig
1. Sex	.049	.324
2. Age	-.135	.007*
3. Education	-.109	.030*

Table 4 Continue

Variable (Take advantage of Twitter)	r	Sig
4. Occupation	-0.13	.788
5. Income	-.245	.000*
6. Years of use	-.257	.000*
7. Usage hours	.136	.006*
8. Cumulative length of use	-.139	.005*
9. Knowledge level	.280	.400

Table 4 shows the results of the analysis of the relationship between demographic characteristics, Twitter media use behavior, the sample's knowledge level, and Twitter utilization. It found that age, education level, income, number of years of using Twitter, and length of use of Twitter with Twitter leverage have a negative relationship. As for the number of hours using Twitter, the use of Twitter have a positive relationship.

Table 5 The predictive powers of the nine variables on Twitter usage behaviors

Predictor	R	R^2	R^2 Change	F	P-value
X_7	.285	.801	.079	35.284	.000*
X_7, X_3	.332	.101	.106	24.557	.000*
X_7, X_3, X_1	.351	.123	.116	18.509	.000*

X_1=age, X_3=education, X_7=usage hours

Table 5 reveals the following results obtained from the stepwise multiple regression:

Step 1: Usage hours (X_7) could significantly explain the variance of the participants' Twitter usage behaviors at the .000 level with the coefficient of determination (R^2) of .801.

Simply put, the results indicated that hours the participants spent using Twitter could predict 8.01% of the variation in their Twitter usage behaviors.

Step 2: After adding the education predictor (X_3), the coefficient of determination significantly increased to .110 at the .000 level, meaning that usage hours and education could predict 11.00% of the variation in their Twitter usage behaviors.

Step 3: The age predictor (X^1) was added in this step, and the coefficient of determination significantly increased to .123 at the .000 level, meaning that usage hours, education, and age could predict 12.30% of the variation in their Twitter usage behaviors.

Table 6 Multiple regression coefficients, constant, and standard error in the prediction of Twitter usage behaviors

Variable	b	β	t	P-value
1. Usage hours	-.135	.027	-4.933	.000*
2. Education	-.138	.038	-3.606	.000*
3. Age	.149	.115	2.412	.016*
Constant = 4.335 and SE = .178				

Table 6 suggests that the regression coefficients of the usage hours' predictor could predict the variation in Twitter usage behaviors at the highest percentage and with statistical significance at the .05 level and the regression coefficients of raw and standard scores (b, β) yielding - .135 and .027, followed by education (b = -.138, β = .038) with statistical significance at the .05 level. On the other hand, age could predict the variation in Twitter usage behaviors at the lowest percentage (b = -.149, β = .115) with statistical significance at the .05 level, with a standard error in forecasting equal to .178.

In this regard, the equation for predicting the behavior of using Twitter of the sample can be written as follows:

Twitter behavior of the sample = 4.335 (constant) + .027 (hours of Twitter use) + .038 (education level) + .115 (age).

Discussion and Conclusion

Thailand is among the nations with a higher rate of social media consumption. On average, Thai citizens stay online for 9 hours and 38 minutes per day compared to the average figure of Americans, i.e., 6 hours and 30 minutes (Bennet, 2021; Matemate, 2016). Twitter is a popular social network that allows direct conversational interactions among users. Consequently, those sharing a common interest and perspective can join conversations with no requirements to reveal physical appearances or proof of any acquaintanceship. Users can discuss ideas through hashtags, a tag search function within Twitter with the # symbol.

In general, hashtags are implemented in conversations to indicate the specificity of a discussed topic. In turn, other users can discover a specific series of discussions by searching with a specific hashtag. Historically, Thai Twitter users have employed a significant number of hashtags both in Thai and English. As a result, Thai Twitter users have generated several messages by facilitating this functionality. Similarly, hundreds of millions of global users have engaged in conversations to exchange perspectives on diverse issues, from personal jokes to global tensions, cultures to protests, and controversies with clashes of opinions. Although many "tweets" are trivial, shocking news, and boring controversies, a core user benefit behind these exchanges via Twitter is the joy of information consumption. News on Twitter is perceived as accurate, reliable, and adequately beneficial for daily consumption among working- age individuals. Consequently, this study contains four points of discussion:

1. Utilization of Twitter among teenagers and working people

The data analysis reveals that adolescents and working adults use Twitter to gain new knowledge from their followers. This information aligns with research by Kidrob (2009) that found that current Twitter users are intended to follow news or events that happen, including to seek information and knowledge. The changing form of mass media makes the way people consume the country's news today in Thailand that requires urgent news tracking. Using Twitter is like tagging and creating trending news topics, resulting in likes, retweets, and following that news quickly. This coincides with the top news around air pollution in Bangkok where the hashtag #PM 2.5 was tweeted 4.8 million times (between December 17, 2018 and January 24, 2019). With people tweeting to share experiences and important news happening in the most polluted areas, Twitter is not just a platform for the latest news. Nevertheless, it also helps Twitter users to stay informed about safety in different areas. (Positionning, 2019).

2. The difference in means of levels of knowledge about Twitter whereby the teenage individuals demonstrating a higher knowledge level

In conclusion, the data analysis showed Twitter utilization's mean and standard deviation. The mean was included at a high level ($\overline{x}$ = 3.71, S.D.=0.97). The sample group used Twitter to find new knowledge. Increase from the people we follow. The mean was high ($\overline{x}$ = 4.16, S.D. = 0.84). Brand Inside's analysis of Thai people's internet usage behaviors (Matemate, 2016) reported that more Thais had begun to use the internet in 2016, and most surf the internet via smartphones (85.5%) at an average of 6.2 hours per day. The figures indicated an improvement compared to 2015, 82.1%, at an average of 5.7 hours per day. This phenomenon showed that smartphone users had increased, mobile network infrastructures had expanded, and the access and use of the internet improved. However, these increasing figures did not seem to contribute to the levels of knowledge about internet usage positively. Brand Inside discovered problematic issues were problem awareness and personal data safety, which suggested that Thai

internet users still paid inadequate attention to internet safety. Several users were too comfortable with giving personal information to strangers.

After comparing the means levels of knowledge about Twitter between the teenage and working-age individuals, the results found that they were different, and the teenage individuals proved to be more knowledgeable about Twitter. The adolescent group had a level of knowledge about Twitter ($\bar{x}$ = 7.515) significantly higher than the working age group with a level of knowledge about Twitter ($\bar{x}$ = 7.100) at the level of (t-test) = 2.499. statistical data .05. In addition, the analysis of the differences in the use of Twitter among adolescents and working people showed that adolescents and working-age groups used Twitter differently. Working-age groups used Twitter ($\bar{x}$ = 3.830) more than the adolescent group with Twitter leverage ($\bar{x}$ = 3.632) at level (t-test) = -3.068.

The results could explain why Twitter was teenagers' most popular social media. Other explanations include that Twitter has the functionality to present up-to-date information in a simple form of communication that is easy to digest, and the daily use of hashtags often catches teenage attention. These notions are consistent with the 2018 statistics of internet users in Thailand (Wayuparb, 2018, as cited in Techajarupun, 2018), which reported the proportion of active Thai Twitter users compared to the previous year. Specifically, the growth of Twitter users spiked by 70% from 5.3 to 9 million, while most were teenagers aged 16-24 years. Moreover, Duangporn Promon, the country director of AdParlor and a Twitter representative of Thailand (Positioning, 2017), pointed out that teenagers under 34 were the majority (65%) of current Twitter users. Breaking into subgroups, those within the age range of 16-24 years were the largest group (35%), followed by those aged 25-34 years (30%). The numbers indicate that teenagers, including lower- and higher-education students, were the largest group of Twitter users. Hence, teenagers reportedly used Twitter more frequently and regularly than working-age individuals could be why they became more knowledgeable about Twitter.

Furthermore, the notions are also in line with Hughes and Wojcik (2019b), which stated that teenagers tend to have a higher level of knowledge about internet usage than their parents because their parents had lower exposure to the internet in the past. Consequently, they appeared to need more knowledge and skills in such technology. Besides, modern-day technology develops more rapidly. Accordingly, parents, guardians, and adults might be less effective at catching up with technology than teenagers. Therefore, teenagers have become more internet-savvy than their parents overall. Congruently, Hughes and Wojcik (2019a) asserted that most Twitter users in the United States are between 18 and 29. Moreover, these teenagers possess higher education and incomes than working-age individuals and adults. Also, higher education and incomes tend to contribute to teenagers' higher knowledge about the use of Twitter.

3. The results of the analysis of the relationship between demographic characteristics of Twitter media usage behavior, knowledge level of the sample group, and utilization of Twitter.

The results showed that age, education level, income, years of Twitter use, and duration of Twitter use and utilization were negatively correlated. In contrast, the number of hours using Twitter with the use of Twitter has a positive relationship.

Morgan-Lopez, Kim, Chew & Ruddle's (2017) study made different demographic predictions for Twitter use. The study found that different demographics use Twitter differently. For example, teenagers and young adults use Twitter, more than seniors. In addition, people with different incomes use Twitter differently.

In addition, the research results also found that the number of hours using Twitter with the use of Twitter has a positive relationship. This is consistent with Jay Trudjan, Head of Brand Advertising Twitter's Asia-Pacific region (Positioning, 2023) reported that the number of hours spent on Twitter increased, particularly from video exposures on Twitter that leveraged the news content, current affairs, and lifestyle, including the most popular stories. It shows that the more hours a Twitter user has, the more they use Twitter. This is also in line with the research of

Pothisoontorn (2014), who studied the factors of Twitter usage behavior in terms of the duration of Twitter use. The study found that when we use Twitter frequently or for a long time, it only results in us using it more. Furthermore, Twitter allows us to receive various information about the products we are interested in, either from the seller himself or even those we follow, making it easier to make valuable decisions than those who rarely use Twitter.

4. The regression analysis predicting Twitter usage behaviors by age, education, and years of use

Thoth Zocial Obivoc, an online data analytics company, published a summary of statistics and behaviors of Thai citizens and social media, which stated that Twitter was the fastest-growing social media platform in 2018 compared to others. In 2016, Twitter had 9 million users and a 70% growth. In 2017, Twitter had 12 million users, a 33% growth, and 5.7 million active users employing Twitter daily. In 2018, Twitter had 20 million users and a 275% growth in ad spending (i.e., from 30 million baht in 2017 to 90 million in 2018). Furthermore, most Twitter users (68%) were 16-34 (Sanook, 2018). Age is a variable that can affect Twitter usage behaviors. Essentially, Millennials are a group of highly influential consumers of brand products. They are the people who have the urge to search for new information of interest via Twitter and tend to spread stories they have learned extensively to families and surrounding people. Besides, teenagers are increasingly turning to Twitter because they see the platform as a new world where they can express themselves more freely than Facebook, a platform with an increasing number of parent users. As parents added their teenage children as Facebook friends, the teenagers began to feel uncomfortable being constantly monitored.

Similarly, Limsakul (2019) and Chaitanya (2019) mentioned that the most prominent user group on Thailand's Twitter was 16-24 years old. Teenagers started using Twitter under the impression that Facebook has become a less secure or private platform since many more of their parents and teachers began using it. They perceived Twitter as still a space with privacy. Hence, it quickly became their escape alternative to avoid the eyes of their acquaintances. Twitter is a

social network where users can freely express themselves without being burdened by social expectations and suppression. Therefore, it was clear that age affected Twitter usage behaviors.

In addition to age, education was another influential variable in this regard. The assertion is consistent with River et al. (1971, as cited in Satawedin, 2003), which stated that those with different education levels could possess different ideologies, tastes, values, and news exposure requirements. People with higher education are more likely to behave more appropriately when using mass media than those with lower education and have a broader knowledge and understanding of terms and information. On the other hand, Satawedin (2003) argued that education is another crucial factor influencing audiences. Hence, people with different levels of education tend to have different sets of emotions, ideologies, and needs. In addition, Kasemchaiyanun (2001) reported that factors affecting website usage behaviors include demographic characteristics such as sex, age, and education. Sampaoprasert (2000) consistently indicated that age and education were correlated with internet usage behaviors.

Also, media exposure experiences and habits were found to affect media choices and news for consumption. According to Ruben, Belmas, Reis & Iverson (2010), audiences develop media exposure habits due to their media exposure experiences, and such habits can grow into preferences for specific media or programs. Consequently, audiences may choose media, take an interest in a subject matter, adopt a perspective to interpret an issue and choose to remember a story based on such preferences.

Recommendations

This study has the following recommendations:

Recommendations for utilization

1. Twitter is a widely popular media among teenagers. This study discovered that teenagers had a higher level of knowledge about Twitter than working-age

individuals. Therefore, relevant parties are suggested to use the results when developing a utilization plan for teenagers by emphasizing presentations via Twitter.

2. Since most teenagers and working-age individuals use Twitter to stay updated with the latest news, relevant parties involved in the use of Twitter are suggested to use Twitter as a channel for teaching activities for schools and universities. For example, Twitter could be a co-learning social network where participants could send questions and post comments through the platform.

Recommendations for future research

1. Further studies are suggested to employ other variables of interest, such as Twitter users' attitudes, or examine levels of Twitter literacy among teenagers and working-age individuals.

2. Further studies are suggested to conduct an in-depth content analysis, such as formats of posts on Twitter and popular content on Twitter in different time brackets.

References

Ad Addict T.H. (2020, February 19). *Digital Thailand 2020: A Summary of 30 Digital Statistics of Thais in 2020, All-in-one Edition*. Retrieved September 16, 2020, from https://adaddictth.com/knowledge. /digital-thailand-2020.

Bennet, J. (2021). *23 Amazing Statistics on Internet and Social Media in 2021*. WizCase. Retrieved September 18, 2021, from https://www.wizcase.com/blog/stats-on-internet-social-media-and-digital-trends/.

Chaipanya, C. (2019). *Twitter Has the Highest Growth in Thailand, but Why Have Marketers Overlooked it? by Chanachai Chaitanya, a Twitter Utilization Expert*. Retrieved October 18, 2021, from https://www.thumbsup.in.th/goh-chanachai-twitter-thailand.

Chaiyasaeng, K. & Fyeted, K. (2013). *Twitter Usage for Television Journalists to Present News*. Bangkok: Kasetsart University. Office of the Higher Education Commission. Ministry of Education.

Chomjuntuek, P. (2018). *Exposure Behavior, Attitudes, and the Travel Decision Processes in Using Travel Hashtags on Twitter*. Master of Arts in Mass Communication, Faculty of Journalism and Mass Communication, Thammasat University.

DeFleur, M.L., & DeFleur, M. H. (2022). *Mass Communication Theories*. (2nd ed.). New York: Routledge.

Electronic Transactions Development Agency. (2019). *ETDA reveals more Thais are using the internet in 2019, with an average time of 10 hours 22 minutes; Gen Y has been the winner for five consecutive years*. Retrieved September 19, 2020, from https://www.etda.or.th/content/thailand-internet-user-behavior-2019-press-release.html.

Hughes, A., & Wojcik, S. (2019a). *They are sizing Up Twitter Users. in Pew Research Center*. April 2019. Retrieved October 19, 2021, from https://www.pewinternet.org/wp-content/uploads/sites/9/2019/04/Sizing-Up-Twitter-Users_FULL-REPORT.pdf.

Hughes, A., & Wojcik, S. (2019). *10 facts about Americans and Twitter*. In Pew Research Center. August 2, 2019. Retrieved October 19, 2021, from https://www.pewresearch.org/fact-tank/2019/08/02/10-facts-about-americans-and-twitter/.

Ruben B. Belmas G. Reis R. & Iverson B. (2010). *Mass communication producers and consumers*. Kendall Hunt Pub.

Junkisen, T. (2019). *Four Behavioral Insights from Twitter: When Thais Watch Dramas While Gossiping Intensely on Twitter*. Retrieved September 17, 2020, from https://thestandard.co/twitter-thai-behavioural-insights/.

Kasemchaiyanun, T. (2001). *Factors Affecting Website Behaviors of Internet Users in Bangkok Metropolitan*. Thammasat University/Bangkok. DOI: https://doi.nrct.go.th/ListDoi/listDetail?Resolve_DOI=.

Kidrob, S. (2009). *Utilization and Social Issues of Twitter in Thailand. Master of Communication Arts*. Thesis Department of Journalism, Chulalongkorn University.

Limsakul, S. (2019). *The Media Exposure Factors Affecting Choosing Entertainment News Selective Behavior on Twitter of The New Generation in Bangkok*. (Independent Study, Master of Communication Arts). Faculty of Communication Arts, Bangkok University.

Matemate. (2016). *Analyzing the Internet Usage of Thais in 2016: Notes that Brands Need to Know.* Brand Inside. August 27, 2016. Retrieved October 19, 2021, from https://brandinside.asia/survey-internet-thailand-user-2016/.

Matichon Online. (2019). February 19). *How to #hashtags to Satisfy Social Media Users*. Matichon. Retrieved September 16, 2020, from https://www.matichon.co.th/news_detail.php?newsid=1030086155.

Morgan-Lopez, A. A., Kim, A. E., Chew, R. F., & Ruddle, P. (2017). Predicting age groups of Twitter users based on language and metadata features. *PloS one, 12(8),* e0183537. https://doi.org/10.1371/journal.pone.0183537.

National Statistical Office. (2019). *1 Demographic Statistics: Population and Housing*. Retrieved September 19, 2020, from http://statbbi.nso.go.th/staticreport/page/sector/ en/01.aspx.

Oongkhing. (2017) *Thoth Zocial Reveals the Statistics of Increasing Thai Teenagers using Twitter: Reiterating Brands' Preparation for "Chatbots."*. Retrieved September 17, 2020, from https://www.thumbsup.in.th/thoth-zocial-statistic-social-media-thai.

Phanpinit, S. (2011). *Research Techniques in Social Science*. 2nd edition. Bangkok: Wittayapat.

Phothisoontorn, C. (2014). *Marketing Mix of #Hashtag on Twitter Affecting People's Decision to Buy Bakery on Twitter*. Master of Business Administration Independent Study, Bangkok University.

Positioning. (2017) *Twitter made a comeback when teenagers ran towards it and away from their parents. What should brands do?*. Retrieved September 19, 2020, from https://bit.ly/2ZE0hBC.

Positioning. (2019). *4 Reasons Thai People Use Twitter*. Retrieved September 19, 2020, from https://positioningmag.com/1219553.

Positioning. (2023). *Penetrating the Behavior of Thai People Spending Time Watching Video Content on Twitter, increasing by 81%.* Retrieved January 15, 2023. https://positioningmag.com/1400916.

Promdirake, J. (2015). *Expectation, Exposure, and Participation in Using Campaign Hashtags in Thailand*. Master of Arts in Mass Communication, Thammasat University.

Rungpattanaphan, *M. (2012). What are Twitter and its Benefits?*. Retrieved September 18, 2020, from https://www.gotoknow.org/posts/310329.

Sampaoprasert, N. (2000). *Internet Use of Beginners in Bangkok Metropolitan and the Impact of Changes in Communication Behaviors*. Bangkok: Thammasat University.

Sanook. (2018). *Thailand Social Award 2018 and the Growth of Facebook-Twitter-Instagram.* Retrieved September 25, 2020, from https://bit.ly/3BoaTBp.

Satawedin, P. (2003). *Mass communication: Processes and theories*. Bangkok: Chulalongkorn University.

Soongsomsakul, R. & Wattanaprapa, N. (2019). A Study on Human Behaviour Using Online Social Media on Twitter Sharing Negative Posts. *The Second National Conference on Research in Humanities and Social Sciences, January 19, 2019*, Faculty of Humanities and Social Sciences, Suan Sunandha Rajabhat University.

Techajarupun, A. (2018). *Revealing Thailand Internet User Profile 2018*. Retrieved September 20, 2020, from https://bit.ly/3jPFstI.

Wang, R., Bianchi, S. M., & Raley, S. B. (2005). Teenagers' Internet Use and Family Rules: A Research Note. *Journal of Marriage and Family, 67(5)*, 1249–1258. http://www.jstor.org/stable/3600310.

Wiboonyasake, M. (2018). *Enjoy the Twitter Realm with Fun Twitter – What do we, Workers, Gain from Twitter?*. Retrieved September 20, 2020, from https://www.aware.co.th/it-jobs/what-makes-thailands-twitter-sphere-so-unique/.