

Influences of Knowledge and Attitude on Using Social Media towards Adolescence's Behavior in Using Social Media for Learning in Bangkok Area

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Abstract

This research aims 1) to investigate a relationship among adolescence's knowledge, attitude, and behavior in using social media for learning, and 2) to examine influence of knowledge and attitude on using social media toward adolescence's behavior in using social media for learning and power of predictor variable. Samples were 901 of those who are 15- 30 years old and living in 50 areas of Bangkok. They were selected by using multi-stage random sampling method. Data were collected through questionnaires and analyzed by descriptive statistics, hierarchical stepwise regression and mediation analysis. The results showed that 1) knowledge, attitude, and behavior in using social media has a significant positive correlation at .05 level, and 2) knowledge has both significant direct and, through attitude, indirect effects on behavior in using social media at .05 level. Also, attitude has a significant direct effect on behavior in using social media at .05 level.

Keywords: influence, social media, knowledge, attitude and learning

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1. Introduction

Today, information technology which is key to delivery and receipt of information for learning has been advancing rapidly. Since there has been no definite differentiation of each platform, these technologies have evolved toward the so-called convergence. According to Sudbanthad (1996), the major convergence is among 3 main technologies, i.e. 1) computer technology which involves the application of micro computers, mini computers and work stations to receive, collect and record external data and convert it into information for various input devices, 2) telecommunication technology which includes telecom devices such as digital mobile phone, etc., and 3) communication system technology which relates to communication system and/or network that enable electronic exchange of information in form of digital data such as internet network which is the world largest computer network.

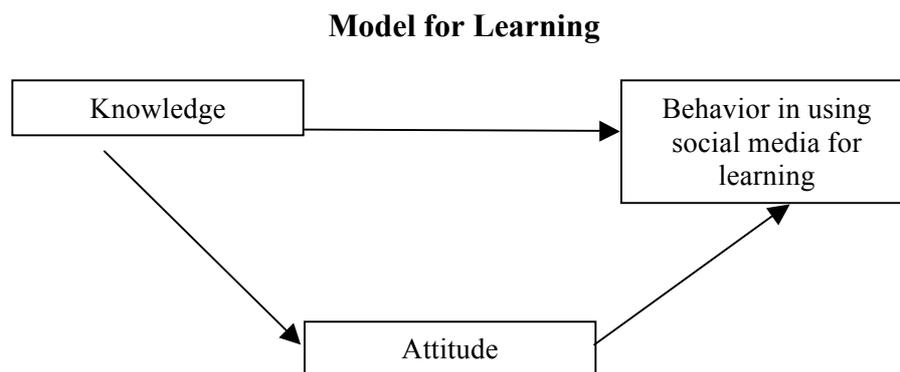
With the convergence of all those three technologies, new media has emerged as a carrier or channel that allows more modern ways of data communication. Logan (2010) describes the new media's major characteristic as an interactive media with easy access and convenient data dissemination. It allows sending of various forms of information including visual, audio and text at the same time. The new media enables enormous freedom to communicate and can respond to information demand of numerous recipients. It also facilitates simultaneous data sending and receipt. The new media therefore supports continuous learning process, integration of various fields of knowledge, and community development. It also has mobility and portability features. With such similar characteristics, "social media" or "social media network" is categorized as new media.

In Thailand, social media is divided into major groups (Kobkij Praditpolpanich, 2010, online), i.e. websites for direct communication network such as Facebook, Windows Live Spaces and Hi5; blogs which are websites that contain general articles and allow responses and exchange of views such as Blogger, WordPress and Twitter; multi-media websites that allows sharing and uploading of visual and audio files, video clips and other files such as YouTube, Slideshare, Flickr, Photobucket, Picasa; and lastly websites for special cooperation such as Wikipedia, an online encyclopedia.

With these characteristics, social media is useful for learning as it enables rapid access to information and saves costs, hence encouraging learning and promoting exchange of knowledge and experiences between individuals and among groups. Social media can also stimulate participation in learning process (Surasak Paje, 2012, online).

From all the above, this study on "Influences of Knowledge and Attitude on Using Social Media towards Adolescence's Behavior in Using Social Media for Learning in Bangkok Area" aims to examine knowledge and attitude to social media use of the population in Bangkok especially adolescence, who are major force of national development, and more importantly, to study their behavior in using social media for learning so as to obtain an empirical answer whether there is a relationship among knowledge, attitude and behavior in using social media for learning. The results of the study can be applied for planning to promote use of social media for learning.

2. Conceptual Framework



3. Objectives

1. To investigate a relationship among adolescence's knowledge, attitude, and behavior in using social media for learning.
2. To examine influence of knowledge and attitude on using social media toward adolescence's behavior in using social media for learning and power of predictor variable.

4. Hypotheses

1. There is a statistically significant level of positive correlation between knowledge, attitude and behavior in using social media for learning of adolescence.
2. Knowledge and attitude on using social media has influence towards adolescence's behavior in using social media for learning.

5. Methodology

This study is a survey research that explores the influence of independent variables on dependent variable. Details are as follows:

5.1 Population and samples: The population was 1,242,340 residents in 50 districts in Bangkok (Department of Provincial Administration, Ministry of Interior, 2013) aged between 15-30 years. The samples were 901 residents of 9 districts, 100 each, who were selected by multi-stage random sampling.

5.2 Variables: The variables in this study included independent variables, i.e. adolescence's knowledge and attitude on using social media, and dependent variable, i.e. behavior in using social media of adolescence.

5.3 Research tool: Questionnaire was used as tool. The validity was tested by internal consistency method using Cronbach' Alpha Coefficient. The validity was 0.940 for knowledge questions, 0.962 for attitude questions and 0.944 for behavior questions. The questionnaire was divided into 5 parts as follows:

- Part 1 - 5 checklists of demographic information
- Part 2 - 5 checklists of social media exposure behavior
- Part 3 - General knowledge of social media use

Part 4 - Attitude on using social media

Part 5 - Behavior in using social media for learning

The questions in Part 3, 4 and 5 contained 5 rating scales, i.e. highest, high, moderate, low and lowest. The meaning of each scale was as follows:

The average score of 4.21-5.00 refers to the highest level.

The average score of 3.41-4.20 refers to high level.

The average score of 2.61-3.40 refers to moderate level.

The average score of 1.81-2.60 refers to low level.

The average score of 1.00-1.80 refers to lowest level.

5.4 Data analysis was divided as follows:

5.4.1. Descriptive statistics which involve frequency, percentage, mean and standard deviation were applied to present the general characteristics of the factors in the study.

5.4.2 Inferential statistics, i.e. hierarchical stepwise regression and mediation analysis with a significance value of 0.05.

6. Results

6.1 Analysis of general characteristics of the questionnaire respondents

The data analysis showed that the majority of the samples were female (51.5%) aged between 15-20 years (41.4%). They had personal income of 10,001-15,000 baht/month (17.5%). Their family income was more than 50,001 baht/month (32.9%) and most were living with their parents (59.6%).

6.2 Analysis of media exposure behavior

According to the analysis, most of the samples used Facebook (77.0%), followed by YouTube and Twitter (8.3% and 4.9% respectively). The highest exposure took place between 21.01-24.00 hrs. (36.3%), followed by 17.01-21.00 hrs. and 09.01-12.00 hrs. (33.5% and 5.8% respectively). The daily period of exposure was around 2-3 hours (38.3%), followed by more than 5 hours and 4-5 hours (33.3% and 20.4% respectively). The highest level of frequency of exposure was daily (55.2%), followed by 3-4 times/week and 5-6 times/week (21.2% and 15.4% respectively). The purpose of the exposure was to contact people (27.5%), followed by to entertain and to search for useful information (27.2% and 19.8% respectively).

6.3 Analysis of knowledge of social media use

It was found that the samples had moderate level of knowledge about social media characteristics, guidelines and legal knowledge (\bar{x} =3.32, \bar{x} =3.31, and \bar{x} =3.30 respectively).

6.4 Analysis of attitude on social media use

The samples had moderate level of attitude on social media use (\bar{x} =3.32). Considering each issue, the issue with the highest score which represented moderate level of attitude was feeling good to keep up with the news from social media (\bar{x} =3.40), followed by viewing that information from social media was reliable and polite manner was required for using social media, which also represented moderate level of attitude (\bar{x} =3.37).

6.5 Analysis of behavior in using social media for learning

The samples had moderate level of behavior in using social media for learning (\bar{x} =3.33). Analysis of each issue showed that issues with the same highest score which represented moderate level of behavior in using social media for learning were use of social media to learn and improve foreign language skill, and use of social media to share photos, videos and audio files and exchange new knowledge in various fields with the general public (\bar{x} =3.39), followed by use of social media as reference source, which represented moderate level of behavior (\bar{x} =3.37).

6.6 Analysis by objectives

1) The analysis of relationship among the variables showed that knowledge, attitude and behavior in using social media for learning had positive correlation at statistical significance of .05.

Table 1: Correlation Coefficient Matrix, Mean, Standard Deviation and VIF

| Variable | Knowledge of social media use | Attitude to social media use | Behavior in using social media for learning | VIF |
|---|-------------------------------|------------------------------|---|-----|
| Knowledge of social media use | 1.00 | | | |
| Attitude to social media use | 0.879** | 1.00 | | |
| Behavior in using social media for learning | 0.823** | 0.855** | 1.00 | |
| Mean | 3.308 | 3.318 | 3.326 | - |
| S.D. | 0.893 | 0.967 | 0.948 | - |
| n=901; *p<0.05; **p<0.01 | | | | |

2) According to the analysis of the coefficient of determination, in Step 1, the independent variable, i.e. knowledge of social media use could predict behavior in using social media for learning at statistical significance of .05 and could explain variation of the dependent variable, i.e. behavior in using social media for learning at 67.7 ($R^2 = 0.677$). In Step 2 when attitude variable was add, the variation of behavior in using social media for learning was 75.3 ($R^2 = 0.753$). Overall, the analysis showed that knowledge and attitude variables could jointly explain variation of behavior variable at up to 75.3% which was significantly high. Details are shown in Table 2.

Table 2: Hierarchical stepwise regression and mediation analysis of behavior in using social media for learning

| Independent Variable | Step1 | | | | | Step2 | | | | |
|-------------------------|----------|------------|-------|--------|-------|----------|------------|-------|--------|-------|
| | b | Std. Error | Beta | t | p | b | Std. Error | Beta | t | p |
| Knowledge | 0.873 | 0.020 | 0.823 | 43.356 | 0.000 | 0.336 | 0.037 | 0.136 | 9.058 | 0.000 |
| Attitude | | | | | | 0.565 | 0.034 | 0.576 | 16.504 | 0.000 |
| Constant | 0.439 | | | | | 0.342 | | | | |
| R | 0.823 | | | | | 0.677 | | | | |
| R ² | 0.677 | | | | | 0.753 | | | | |
| Adjusted R ² | 0.677 | | | | | 0.752 | | | | |
| R ² Change | 0.677 | | | | | 0.075 | | | | |
| F | 1879.743 | | | | | 1360.714 | | | | |
| df | 896 | | | | | 895 | | | | |
| p | 0.000 | | | | | 0.000 | | | | |

The independent variables, i.e. knowledge and behavior, were examined using the hierarchical stepwise regression and mediation analysis, which was divided into 2 steps according to order of variables in the conceptual framework. Details are as follows:

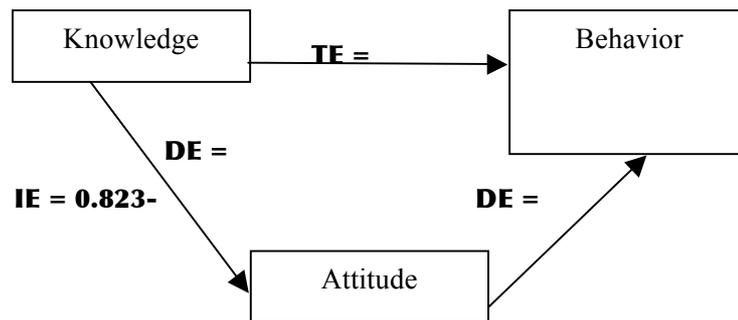
Step 1 – The analysis of independent variables, i.e. knowledge and behavior, showed that knowledge had positive influence on behavior in using social media for learning at high statistical significance of 0.05 (B =0.823, p = 0.000).

Step 2 – Added by the attitude variable which was the mediator between knowledge and behavior variables, it was found that direct influence of knowledge on behavior dropped from 0.823 in Step 1 to 0.316 in Step 2. This indicated indirect influence through the mediator, i.e. attitude on using social media, of 0.507 which represented moderate influence at statistical significance of 0.05 (B =0.316, p = 0.000).

Meanwhile, it was found that attitude had moderate level of direct influence on behavior in using social media for learning of 0.567 with statistical significance of 0.05. Details are show in Table 3 and Figure 1 below:

Table 3: Results of coefficient analysis divided into overall influence, direct influence and indirect influence

| Variable | IV | | | p | Error |
|-----------|--------------|-------|-------|-------|-------|
| Knowledge | Via Attitude | DE | TE | | |
| | | 0.507 | 0.823 | 0.000 | 0.037 |
| Attitude | | 0.576 | 0.576 | 0.000 | 0.034 |



7. Conclusion and Discussion of Results

In this study on “Influences of Knowledge and Attitude on Using Social Media towards Adolescence’s Behavior in Using Social Media for Learning in Bangkok Area”, most of the samples were female, aged between 15-20 years, and lived with their parents. They mostly used Facebook to contact with people for 2-3 hours/day. The period of daily exposure was from 21.01-24.00 hrs. The samples had a moderate level of knowledge, attitude and behavior in using social media for learning.

The objectives of this study were to investigate a relationship among adolescence’s knowledge, attitude, and behavior in using social media for learning, and to examine influence of knowledge and attitude on using social media towards adolescence’s behavior in using social media for learning and power of predictor variable. There were 2 hypotheses, 1) there is a statistically significant level of positive correlation between knowledge, attitude and behavior in using social media for learning of adolescence, and 2) knowledge and attitude on using social media has influence upon adolescence’s behavior in using social media for learning.

The results supported the 1st hypothesis, i.e. knowledge, attitude, and behavior in using social media for learning has positive correlation at statistical significance of .05, and the 2nd hypotheses, i.e. knowledge has both significant direct and, through attitude, indirect effects on behavior in using social media at statistical significance of .05. Attitude also has direct effect on behavior in using social media at statistical significance of .05.

The results which supported the two hypotheses are in line with Knowledge, Attitude, Practice (KAP) model. Knowledge is the ability to apply facts, ideas or insights or the ability to connect ideas with incidents. Knowledge can be acquired when a person has experience in learning the facts or situation and details through the process of gathering and collecting for further utilization. It also refers to a recall of stories such as methods, procedures and incidents. Such recall is just a recognition which can occur through seeing or hearing practice. (Good, 1973; Patrick, 1961, online)

Attitude refers to feeling of like or dislike that an individual has towards a particular thing. It arises from the increasing experience. However, the changing process may be fast or slow, depending on attitude type and new experience. It can be developed based on other's attitude towards that particular thing. Therefore, attitude is each person's readiness to evaluate whether a particular item, person, idea or place is good or bad, satisfactory or unsatisfactory and to assess his/her behavioral trend, e.g. to support or object, to fight or to run away. Attitude can be cultivated or changed during the period from childhood to adulthood. It may be developed into persistent behavior and later become personality. Attitude is changeable in response to the environment and society (Bloom, 1971; Gibson, 2000).

Practice refers to an individual's behavior that may arise from accumulated experiences in the past or new learning, and is determined as practice based on his/her additional opinions. An individual would try out and assess behavior. If he/she sees its benefits, it will become his/her practice (Schwartz, 1975).

From the above definitions, it can be concluded that knowledge, attitude and practice are related. Knowledge arises from experience which relates to attitude and practice. In addition, according to Schwartz (1975), the relationship among knowledge, attitude and practice features 4 major characteristics as follows:

1. There is a relationship between knowledge and attitude, which leads to practice.
2. Attitude is the mediator that leads to practice. Thus, knowledge is related to attitude and affects practice.
3. Knowledge and attitude can lead to practice whereas relationship between knowledge and attitude is not necessary.
4. Knowledge has both direct and indirect effect on practice.

The conclusion on the relationship among knowledge, attitude and practice well supports the results of this study that there is a relationship among knowledge, attitude and behavior in using social media for learning. Moreover, knowledge has direct and, through attitude, indirect effects on behavior in using social media for learning. Attitude also has direct effect on behavior in using social media for learning. Furthermore, there are studies that also reflect the relationship among knowledge, attitude and practice. For instance, according to the study on "Knowledge, Attitudes and Behaviors about Food Consumption of Ramkhamhaeng University Undergraduate Students" of Phonsiri (2008), it was found that knowledge, attitude and behaviors about food consumption of the samples had positive correlation at statistical significance of 0.05. In the study of Lertpongpakorn (2011) on "Knowledge, Attitude and Practices of the Thai PBS Employees in Corporate Social Responsibility Regarding Public Broadcasting Services", it was revealed that

knowledge, attitude and CSR practices of public broadcasting services had positive correlation at statistical significance of 0.05.

Therefore, in this study on “Influences of Knowledge and Attitude on Using Social Media towards Adolescence’s Behavior in Using Social Media for Learning in Bangkok Area”, it can be concluded that if the samples have good knowledge and positive attitude on using social media, behavior in using social media for learning will be well supported.

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