

ปัจจัยที่มีผลต่อการรู้เท่าทันสื่อออนไลน์เรื่องเพศของนักเรียนชั้นมัธยมศึกษาตอนปลาย ในเขตอำเภอเมือง จังหวัดจันทบุรี

Factors Affecting Online Sexual Media Literacy among Senior High School Students in Mueang District, Chanthaburi Province

นิพนธ์ต้นฉบับ

Original Article

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บทคัดย่อ

วัตถุประสงค์: เพื่อศึกษาปัจจัยที่มีผลต่อการรู้เท่าทันสื่อออนไลน์เรื่องเพศของนักเรียนชั้นมัธยมศึกษาตอนปลาย **วิธีการศึกษา:** การศึกษาความสัมพันธ์เชิงทำนายมีตัวอย่างเป็นนักเรียนชายและหญิงระดับมัธยมศึกษาตอนปลายทั้งภาครัฐและเอกชน ในเขตอำเภอเมือง จังหวัดจันทบุรี ด้วยการสุ่มอย่างง่ายจำนวน 194 คน รวบรวมข้อมูลระหว่างสิงหาคมถึงกันยายน พ.ศ. 2564 โดยใช้แบบสอบถามข้อมูลส่วนบุคคล มารายงานในการใช้สื่อออนไลน์ ทักษะคิดต่อการใช้สื่อออนไลน์เรื่องเพศ อิทธิพลของเพื่อนต่อการใช้สื่อออนไลน์เรื่องเพศ การเปิดรับข้อมูลข่าวสารออนไลน์เรื่องเพศ และการรู้เท่าทันสื่อออนไลน์เรื่องเพศ วิเคราะห์ข้อมูลด้วยสถิติสมการถดถอยพหุคูณแบบขั้นตอน **ผลการศึกษา:** การรู้เท่าทันสื่อออนไลน์เรื่องเพศมีระดับปานกลาง ($M = 3.33 \pm 1.35$) ทั้ง 4 ปัจจัยสามารถรวมทำนายการรู้เท่าทันสื่อออนไลน์เรื่องเพศ ได้แก่ อิทธิพลของเพื่อนต่อการใช้สื่อออนไลน์เรื่องเพศ ($\beta = -0.240$) มารายงานในการใช้สื่อออนไลน์ ($\beta = 0.253$) การเปิดรับข้อมูลข่าวสารออนไลน์เรื่องเพศ ($\beta = -0.215$) และทัศนคติต่อการใช้สื่อออนไลน์เรื่องเพศ ($\beta = 0.186$) โดยร่วมกันทำนายการรู้เท่าทันสื่อออนไลน์เรื่องเพศได้ร้อยละ 27.3 ($R^2 = 0.273$, $P\text{-value} < 0.01$) **สรุป:** อิทธิพลของเพื่อนต่อการใช้สื่อออนไลน์เรื่องเพศ มารายงานในการใช้สื่อออนไลน์ การเปิดรับข้อมูลข่าวสารออนไลน์เรื่องเพศ และทัศนคติต่อการใช้สื่อออนไลน์เรื่องเพศสามารถทำนายการรู้เท่าทันสื่อออนไลน์เรื่องเพศในนักเรียนมัธยมศึกษาตอนปลาย อาจใช้เป็นข้อมูลในส่งเสริมให้นักเรียนมีการรู้เท่าทันสื่อออนไลน์เรื่องเพศผ่านทางปัจจัยทั้งสี่ด้าน

คำสำคัญ: การรู้เท่าทันสื่อออนไลน์เรื่องเพศ, นักเรียนชั้นมัธยมศึกษาตอนปลาย

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Abstract

Objective: To identify factors affecting online sexual media literacy among senior high school students. **Method:** One hundred and ninety-four senior high school students in Muang district, Chanthaburi province were recruited using simple random sampling technique. Data were collected using questionnaires on demographic information, online media etiquette, attitude, peer influence, susceptibility, and online sexual media literacy. Stepwise multiple regression analysis was used to analyze associations. **Results:** The results revealed that online sexual media literacy of the participants were at a moderate level ($M = 3.33 \pm 1.35$). The significant predictors of sexual media literacy of the participants were peer influence ($\beta = -0.240$), online media etiquette ($\beta = 0.253$), susceptibility ($\beta = -0.215$), and attitude ($\beta = 0.186$). These predictors could together explain 27.3 % of variance in sexual media literacy among senior high school students ($R^2 = 0.273$, $P\text{-value} < 0.01$). **Conclusion:** Peer influence, online media etiquette, susceptibility and attitude predicted online sexual media literacy among senior high school students. Findings could be useful in promoting online sexual media literacy through these factors.

Keywords: online sexual media literacy, senior high school students

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Introduction

In the digital world, of a world population of 7,810 people, 4,660 million have access to the Internet (59%) and 4,140 million used online media (49%). The use of the Internet has been increased by 7.4% or 321 million with the increased use online media of 12.3% or 453 million.¹ In Thailand, there are 50.18 million using the Internet or 67% of Thai population which is higher than worldwide average.²

Chanthaburi province is a hub for economic and tourism in the eastern Thailand. Proportions of the Internet users were 56.42%, 60.90% and 68.50% in 2017, 2018, and 2019,

respectively. With an upward trend, it is expected that the Internet users would be 70 – 90% of population.³

The Internet is influential to living worldwide, including teenagers. High school students aged 15 – 19 years old are subject to the use of online media the most.⁴ These teenagers sometimes lack literacy for online media especially for sexual content. The Internet media influences developing and/or changing attitude and behavior of teenagers. If teenagers imitate what they consume from the Internet media mindlessly with no critical thinking such as pornography, premature

sexual intercourse could be a result⁵ which could lead to undesired teenager pregnancy and sexually transmitted diseases. The circumstances are consistent with the report of Department of Health in 2019 where there were 61,651 cases of pregnancy of teenager aged 15 – 19 years old (or 22.6%) and 83.9% of them were in regular school years.⁶ The most prominent enabling factor for teenager's sexual intercourse is pornographic media shown as video clips in telephone (64.9%).⁷ Pregnancy in teenagers or school-age adolescents negatively causes school drop-out to work to for child care. With immaturity, quality of life of these female teenagers usually becomes poor.

In Chanthaburi province, teenage pregnancy is at the level that is similar to the nationwide situation. Pregnancy with delivery rate among female teenagers aged 15 – 19 years old was 27.08% in 2019 and 27.47% in 2020. Pregnancy with delivery rate in female teenagers aged 15 – 19 years old has been increasing every year and higher than the nationwide level. With the concern about teenage pregnancy, Chanthaburi province aims to handle the problem in the provincial plan 2023 to 2027 by innovative activities to reduce teenage pregnancy.³

The Act of Safe and Creative Media 2015 aims to encourage, promote and support the use of safe and creative media for Thai people especially children, adolescents and family through media literacy development. The use of smartphone or mobile phone has been increasing which allows more access to online media. Adolescents should be equipped with media literacy skills to benefit from and not be deceived by online media.⁸

Sexual media literacy is a skill that could protect individuals especially high school teenagers from inappropriate sexual content. In general, media literacy consists of 4 components specifically access, analysis, evaluation and creativity.⁹⁻¹¹ In other words, media literacy means consuming the media mindfully and being able to use logic to distinguish facts from the media. High school teenagers with media literacy could deal with media properly especially sexual media.

Previous research and related documents indicate that most studies about sexual media literacy in Thailand have been around undergraduate students, senior high school students, junior high school students, and primary school students in Bangkok and vicinity, central region, northern region, and southern region. In the eastern region, there was

a study in Chonburi province. In Chanthaburi province, which is in the eastern region, there was a study in senior high school students about media literacy, but not sexual media literacy. More adolescents aged 15 – 19 years in Chanthaburi have been using the Internet and have had pregnancy with delivery. Adolescents at these age are more curious about sexual online media and imitation is more prominent.⁴ They need thus need to be equipped with media sexual literacy. But first, there should be more understanding about their sexual media literacy skill level.

This present study aimed to determine sexual media literacy among senior high school students aged 15 – 18 years old in Chanthaburi province of Thailand. We based our study on the media literacy concept of UNESCO 2013 which consists of personal, institutional, and societal factors¹² and a concept developed by Yenjabok¹³ which was modified from the one of UNESCO to better fit Thai context. We also considered other selected factors based on literature. These selected factors related to sexual media literacy included academic achievement which is cumulative grade point average¹⁴⁻¹⁶, etiquette in using online media which is behavior and appropriateness during the use of online media^{10,17-20}, attitude toward the use of sexual media which means belief and feeling toward online sexual media^{21,22}, influence of friends on online sexual media which is actions that are the results of imitating friends in accessing online sexual media^{14,21-23}, and susceptibility of online sexual media which means duration of accepting online sexual media.^{17,24,25}

Community nurses are responsible for monitor and promote health, prevent and treat illness, and rehabilitate individuals in the community.²⁶ Adolescents aged 15 – 18 are more likely to expose to online sexual media. Understanding sexual media literacy of these adolescents could be useful for school administrators, teachers, and community nurses in guiding them and equipping them with proper skills both in schools and communities. They could use the information in planning health education, developing curriculum, revising content toward more sexual literacy. This study aimed to determine associations of online sexual media literacy with its predictive factors among senior high school students in Muang district of Chanthaburi province, Thailand. It was hypothesized that academic achievement, etiquette in using online media, attitude toward the use of sexual online media, influence of friends on the use of sexual online media, and susceptibility

of online sexual content could predict online sexual media literacy.

Methods

In this predictive correlational research, study population was 5,027 senior high school students both in public and private schools (6 schools) in Muang district of Chanthaburi province in the academic year 2021. The sample was 194 students selected by simple random sampling.

To be eligible, students had to be able to communicate in Thai language, 15 to 19 years old, and willing to participate. Those who were with depressive symptoms (i.e., CES-D score higher 22 points) were excluded.

The sample size was estimated using power analysis of software program G* Power 3.1.9.²⁷ A previous research on media susceptibility, information sharing, and health media literacy showed that media susceptibility was correlated with health media literacy in social media with $r = 0.265^{25}$ which could be calculated with the equation of $f^2 = r^2 / (1 - r^2)$ into an effect size of 0.0755. With a type I error of 5%, power of 80%, and an effect size as previously mentioned, a sample size of 176 participants was needed. To compensate for possible incomplete data, 10% of participants (i.e., $n = 18$) were added to result in a total of 194 participants.

Research instruments

The participants were screened for depression before participating the study using Thai version of Center for Epidemiologic Studies- Depression Scale (CES-D). The questionnaire screens depressive symptoms within the last week. The questionnaire was translated into Thai language and had a good internal consistency reliability with a Cronbach's alpha coefficient of 0.860.²⁸ The questionnaire has 20 questions with a response of a 4-point rating scale ranging from 0-never (< 1 day), to 1-rarely (1 – 2 days), 2-often (3 - 4 days), and 3-all the time (5 – 7 days). With a possible total score of 0 – 60 points, a total score of less than 22 points was considered no depressive symptoms.

The second set of instruments consisted of 6 parts. The first part collected demographic characteristics of the participants including gender, year of study, cumulative grade point average, living arrangement, and family status.

The second part evaluated etiquette in using online media which means the expression during online use before

responding and spreading information to others.²⁰ The 28 questions have a response of a 5-point rating scale ranging from 1-lowest, to 2-low, 3-moderate, 4-high, and 5-highest for 12 positive statements and in the opposite direction for 16 negative statements. With a possible total score of 28 – 140 points, higher scores indicate a higher level of etiquette in using online media. Based on standardized means, levels of etiquette were categorized as lowest, low, moderate, high and highest (1.00 - 1.80, 1.81 - 2.60, 2.61 - 3.40, 3.41 - 4.20 and 4.21 - 5.00, respectively).²⁹ The scale had an acceptable internal consistency reliability (Cronbach's alpha coefficient of 0.757).²⁰

The third part assessed attitude toward the use of online sexual media. The 19 questions asked students about beliefs and perception toward the use of online sexual content.²¹ The response was a 5-point rating scale ranging from 1-disagree the most, to 2-disagree, 3-neither disagree or agree, 4-agree, and 5-agree the most for 16 positive statement, and in the opposite direction for 3 negative statements. With a possible total score of 19 – 95 points, higher scores indicate a higher level of positive attitude. Based on standardized means, levels of positive attitude were categorized as lowest, low, moderate, high and highest (1.00 - 1.80, 1.81 - 2.60, 2.61 - 3.40, 3.41 - 4.20 and 4.21 - 5.00, respectively).²⁹ The scale had a high internal consistency reliability (Cronbach's alpha coefficient of 0.884).²¹

The fourth part assessed the influence of friends on the use of online sexual media. The five questions asked about action, thoughts and behavior of imitating friends in using online sexual media.²¹ Response was a 7-point rating scale ranging from 1-everyone, to 2-almost everyone, 3-more than half, 4-half, 5-less than half, 6-almost none, and 7-none). With a possible total score of 5 – 35 points, higher scores indicate a higher level of friend's influence. Based on standardized means, levels of influence were categorized as low, moderate, and high (1.00 - 3.00, 3.01 - 5.00 and 5.01 - 7.00 points, respectively).²⁹ The scale had a high internal consistency reliability (Cronbach's alpha coefficient of 0.882).²¹

The fifth part evaluated susceptibility to online sexual media regarding frequency of the use either reading, watching, and obtaining information.¹⁶ The 12 questions consisted of 2 questions with checklist and 10 questions with 6-point rating scale ranging from 0 "never" to 1 "1 – 2 times/week," 2 "3 – 4 times/week," 3 "5 – 6 times/week," 4 "7 – 8 times/week," and 5 "more than 8 times/week). Scores from

two parts were summed up. With a possible total score of 0 – 60 points, higher scores mean a higher susceptibility to online sexual media. . Based on standardized means, levels of susceptibility were categorized as low, moderate, and high (0.00 -1.66, 1.67 – 3.33 and 3.34 – 5.00 points, respectively).²⁹ The scale had a high internal consistency reliability (Cronbach’s alpha coefficient of 0.915).¹⁶

The last part assessed sexual media literacy. The questions asked the student’s ability to access, analyze, evaluate and create the media which means how the students used logic or rationale to distinguish facts from the sex media.⁵ The 20 questions used a response of a 5-point rating scale ranging from 1-the lowest, to 2-low, 3-moderate, 4-high, and 5-the highest for 11 positive statements, and in opposite direction for 9 negative statements. With a possible total score of 20 – 200 points, higher scores indicate higher media literacy. . Based on standardized means, levels of media literacy were categorized as lowest, low, moderate, high and highest (1.00 - 1.80, 1.81 - 2.60, 2.61 - 3.40, 3.41 - 4.20 and 4.21 - 5.00 points, respectively).²⁹ The scale had a high internal consistency reliability (Cronbach’s alpha coefficient of 0.834).⁵

Participant ethical protection

The study was approved by the Ethics Committee for Human Study of Burapha University (approval number: G-HS031/2564; approval date: July 16, 2021). The participants were provided with objectives, procedure, and voluntary nature of the study. The participants had to provide written informed consent. The participants could refuse or withdraw from the study at any time with no negative consequences. Since the participants were younger than 18 years old, written informed consent from parents were obtained one week before the study. Code was used in the questionnaire instead of name. Results were presented as a summary, not individual participant’s information.

Data collection procedure

The researcher asked teachers to arrange time and space for the researcher meeting with prospective participants. Social distancing was implemented for Covid-19 pandemic. The researcher collected data through Google Form. The researcher met and screened depressive symptoms in prospective participants. The researcher also provided information and obtained written informed consent from

students and parents. QR code was provided to participants for online questionnaire completion which took 25 – 30 minutes. Participants completed the online questionnaire in their privacy with no teacher or researcher.

Data analysis

Descriptive statistics including mean with standard deviation and frequency with percentage were used to summarize demographic and clinical characteristics of the participants and study factors. Stepwise multiple linear regression analysis was used to determine the association between sexual media literacy and its predictive factors. All assumptions for linear regression were met. Statistical significance was set at a type I error of 5% (i.e., P-value < 0.05). All statistical analyses were performed using software program SPSS version 20.

Results

Of the 194 participants, the majority were female students (60.8%), were in grade 11 (34.0%) followed by grade 10 (33.5%), had cumulative grade point average of 3.01 – 4.00 (97.4%), lived with parents (88.7%), and had both parents living together (73.7%).

Online sexual media literacy of the participants were at a moderate level (mean = 3.33 ± 1.35 points). For predictive factors, etiquette in using online media was at the highest level (mean = 4.48 ± 1.02 points), while attitude toward the use of online sexual media was at a moderate level (mean = 3.26 ± 1.16 points), influence of friends was at a low level (mean = 2.03 ± 1.47 points), and susceptibility to online sexual media was at a low level (mean = 0.50 ± 0.81 points) (Table 1).

Table 1 Scores of alcohol craving and stress (N = 194).

Predictive factors	Mean	SD	Level
Etiquette in using online sexual media	4.48	1.02	Highest
Attitude toward the use of online sexual media	3.26	1.16	Moderate
Influence of friends on the use of online sexual media	2.03	1.47	Low
Susceptibility on the use of online sexual media	0.50	0.81	Low

All four factors were significantly predictive of online sexual media literacy with 27.3 of its variance explained ($R^2 = 0.273$, P-value < 0.001). In a descending order of the R^2 change, the most influencing factor was influence of friends on the use of online sexual media followed by etiquette in using online sexual media, attitude toward the use of online sexual media, and

susceptibility on the use of online sexual media, (R^2 change = 0.145, 0.065, 0.034, and 0.029, respectively) (Table 2).

Table 2 Stepwise multiple linear regression of online sexual media literacy (N = 194).

Predictive factors	R^2 change	b	SE(b)	Beta	t	P-value
Influence of friends on the use of online sexual media	0.145	-0.362	0.106	-0.240	-3.418	< 0.001
Etiquette in using online sexual media	0.065	0.173	0.044	0.253	3.955	< 0.001
Susceptibility on the use of online sexual media	0.029	-0.455	0.150	-0.215	-3.027	0.007
Attitude toward the use of online sexual media	0.034	0.203	0.068	0.186	2.973	0.003
Constant = 37.627			7.452		5.049	< 0.001

$R^2 = 0.273$, $R^2_{adj} = 0.258$, $F_{(4,189)} = 17.785$, P-value < 0.001.

Discussions and Conclusion

Influence of friends on the use of online sexual media was the most predictive on online sexual media literacy with 14.5% variance explained (R^2 change = 0.145, P-value < 0.001, β = -0.240). Influence of friends was at a low level (mean = 2.03). Friend's influence had a negative effect on online sexual media literacy (β = -0.240) which means that friend's influence does not convey to more literacy but more likely to cause imitation with no logical or rational thinking or inhibition. Teenagers agree with what friends tell them to do or follow the group's rule so that they can feel accepted.¹⁵ Most communication among friends was usually about pornography consumption; while a little time was for studying about sexual education. This finding is consistent with previous studies on influence of friends on sexual online media use.^{23,24}

Etiquette in using online sexual media was additionally predictive on online sexual media literacy by with 6.5% variance explained (R^2 change = 0.065). Adding to 14.5% variance explained by influence of friends, these two factors explained 21.0% of the literacy variance. Etiquette in using online media in Thai context includes posting polite, positive message with respect to other viewer's feeling, expressing opinions with good manner, being considerate in sharing or forwarding the message, posting correct message by checking before posting, being aware of the right of forwarding the message, and forwarding the message with good intention.²⁵ Etiquette was at a highest level (mean = 4.48) and had a positive effect on the literacy (β = 0.253). In this study, participants reported no hacking social media for information of others, no modifying or fabricating information and no disseminating pornographic content. This could be because most participants were female teenagers (60.8%) who usually use social media carefully, and with a concern for personal and society impact than male

counterparts.¹⁸ This finding is consistent with previous studies about etiquette in using online media.^{10,27}

Susceptibility on the use of online sexual media was additionally predictive on online sexual media literacy by with 2.9% variance explained (R^2 change = 0.029). Adding to 21.0% variance explained by the previous two factors, these three factors explained 23.9% of the literacy variance. Susceptibility was at a low level (mean = 0.50) and had a negative effect on the literacy (β = -0.215). This could mean that the participants had high literacy because they were less susceptible to online sexual media. The persons would be susceptible to information that they are interested.²¹ So when they are more literate about sexual content, they would consume less. In other words, they are less susceptible to the media. Most participants access to online sexual content once weekly by average and spent less than an hour each time. This limited time of media exposure could be because only 39.2% of the participants were men which usually spend more time on online sexual media than women.^{21,23}

Attitude toward the use of online sexual media was additionally predictive on online sexual media literacy by with 3.4% variance explained (R^2 change = 0.034). Adding to 23.9% variance explained by the previous three factors, these four factors explained 27.3% of the literacy variance. Attitude was at a moderate level (mean = 3.26) and had a positive effect on the literacy (β = 0.186). Attitude involves thinking, tendency, and preference toward information and susceptibility. Attitude exerts the expression of behavior.³¹ A moderate level of attitude indicates that the participants usually had appropriate attitude toward online sexual media, but certain aspects need to be improved toward a productive one. For example, the questions with the highest mean were "consumption of pornographic media was not good, but it is the person's right," "consumption of pornographic media was not appropriate for women," and "it is normal for men to consume pornographic media." This finding is consistent with a previous study on attitude toward online media.¹⁸

This study has certain limitations. With Covid-19 pandemic, data collection procedure was changed to Google Form online survey. This mode of questionnaire completion might affect the way the participants responded. The majority of participants were female teenagers which could represent male counterparts less than adequate.

For practice, schools could use the findings for activities to enhance sexual literacy through online media. Sexual

health education could be planned more effectively. Curriculum could incorporate the content and promotion of sexual media literacy to improve students' attitude toward online sexual media literacy.

For future research, program to improve online sexual media literacy should be developed and tested. Effects of influence of friends on the use of online sexual media, etiquette in using online sexual media, susceptibility on the use of online sexual media, and attitude toward the use of online sexual media should be thoroughly examined. Studies should be extended to other groups of adolescents especially younger students so the problems could be detected and prevented at an early age. More qualitative studies should be conducted to have an in-depth understanding of the online sexual media literacy and its influencing factors.

In conclusion, influence of friends on the use of online sexual media, etiquette in using online sexual media, susceptibility on the use of online sexual media, and attitude toward the use of online sexual media could significantly predict online sexual media literacy in senior high school teenagers. Activities to promote online sexual media literacy could be done through its predictive factors.

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