



DETERMINANTS OF RISKY SEXUAL BEHAVIOR IN LINE WITH SOCIAL MEDIA UTILIZATION: THE CASE OF HAWASSA UNIVERSITY, SCHOOL OF INFORMATICS STUDENTS

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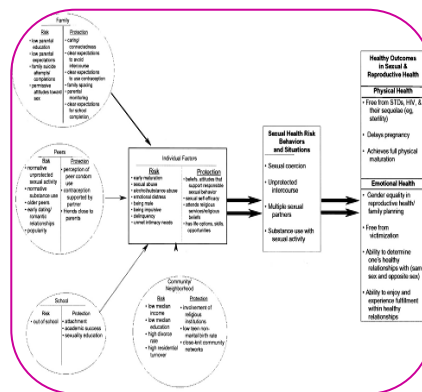
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ABSTRACT

The purpose of the study was assessing the determinants of risky sexual behavior in line with social media utilization in the school of informatics, Hawassa University. In doing so, descriptive cross-sectional research design was employed. Data were produced from a total of 291 participants from



school of informatics, of which 204 them were males and the remaining 87 females. Questionnaire and key informant interview protocols were utilized as a data gathering tools. At last data were analyzed by using quantitative and qualitative approaches. Descriptive statistics and multiple regression

were used to analyze quantitative data, on the other hand, the qualitative data were analyzed thematically and using narrative mode. The result revealed that entertainment, communication with other people and making companionship were the major reasons school of informatics students to utilize social media, respectively. Moreover, regression shows that sex, age, year, place of origin and time of using Social Media (SM) were statistically significant and they are determinants of risky sexual behavior in line with social media usage. In sum from the current study we can conclude that school of informatics sexual behavior is affected by social media utilization. Hence, planning and designing some modality that assists students to use social media for educational issues than mere entertainment is vital. As well, enhancing student's awareness about the negative repercussions of social media particularly related to risky sexual behavior if it is not used wisely.

KEYWORDS : Risky Sexual Behavior, Social Media Utilization.

INTRODUCTION

Like others industries, communication industry takes its verge to its climax by introducing the essence of social media as a best channel to share what we have for the entire world. Social media defined as, forms of electronic communication (as Web sites for social networking and micro blogging) through which users create online communities to share information, ideas, personal messages, and other content (Merriam-Webster, 2014).

The development of identity and sexual behavior are among the major psychological events in human development. More importantly, the period of adolescence is a stage of human development fundamentally important time for searching one's identity and active involvement in

sexual activities (Marcia, 1993). In addition, Steinberg (1993) explained that with pubertal changes, sexuality becomes the most important aspect of development during adolescence. Hence, figuring out how to deal with sexual desires and how to incorporate sex in to social relationships is one of the major tasks of adolescents.

However, on top of the aforementioned factors leading media researchers now view the media in general, as a context of adolescent development, as acting as a “super peer” that influences adolescents’ sexual attitudes and behaviors (Brown, Halpern, & Engle, 2005 cited in Roger, 2007). Today, regardless of the type of media consumed, children and adolescents are constantly witnessing media-based characters being reinforced, being punished, or not experiencing any consequences for their actions (Kerish, 2010). For instance, there is increasing evidence that exposure to sexual content on traditional media such as television is a significant contributor to many aspects of young people’s sexual knowledge, beliefs, expectations, attitudes, and behaviors. In other words, Television plays a meaningful role in sexual socialization (Donnerstein& Smith, 2001).

Moreover, adolescents who are exposed to more sexual content in the media, and who perceive greater support from the media for teen sexual behavior, report greater intentions to engage in sexual intercourse and more sexual activity (Engle et al., 2006). Similarly stemming from concerns about teenage pregnancy, sexually transmitted infections, and human immunodeficiency virus, renewed attention has focused on possible connections between media use and adolescent sexual behavior (Monique, 2005).

Many studies authenticated different possible factors that contribute to adolescents’ behavioral problems including risky sexual behavior. Among the factors puberty, is a biological factor, has a potential cause for adolescents’ behavioral problems. Regarding this, Steinberg (2005) described that Pubertal development has been correlated with a variety of behavioral changes; among the behaviors hypothesized to be influenced by pubertal maturation is the rise in sexual activity and interests. The other possible factor is the context in which adolescents’ grown up; for example, most adolescents make uninformed sexual decisions because of lack of proper guidance and information from the sides of their parents and other members of the society (Kimmel &Weinner, 1995). Similarly, Steinberg (1993) described that the main influences on adolescents’ sexual behavior are social, not biological. Consequently, adolescents’ initiative to sexual practices becomes inevitable for the aforementioned rationale. Besides, engagement in risk behaviors peaks during adolescence. Adolescents are over-represented in nearly every category of risk behavior, such as drug use, alcohol consumption, smoking, skipping school, and unsafe sexual activities (Boyer, 2006).

Nowadays, the internet has created a phenomenon for people to use different SM sites such as Facebook, Whatsup, Viber, Youtube, and Twitter to create and sustain relationships with others. The SM site helps the user to create personal profiles, while connecting with other users of the sites. Moreover users can post photographs, upload or download what they need at any time, and send personal or public messages to whomever they choose. Hence, it seems that the emergence and development of new communication technologies deeply infiltrate adolescents’ lives positively or negatively.

An international study regarding Social Network Media (SNM) usage by Lenhart and Madden (2007) reported that 73% of teens between the ages of 12 and 17 owned profile in SNM sites. Also, with regard to frequency of use, 57 (59.4%) students visited a social networking site several times a day (Sponsil & Gitimu, 2012). However, in consequence to SM usage, adolescents are reflecting their sexual behaviors using SNM sites. In line with this, a study by Loss (2012) reported that as adolescents are prone to display risky health behavior in the offline world, it is likely that they use their online profiles and communications to report on unhealthy behaviors too. This may in turn enhance the perceived attractiveness of risky behavior within the adolescent SM users’ cohort. Pertaining to risk perception to SM usage, a study by Liau, Khoo and Hwaang (2005) indicated that there is reason to be concerned about risk perception of adolescents’ Internet use as 16% of adolescent Internet users in Singapore have had a face-to-face meeting with someone first

encountered online. Out of these adolescents, 22% of them went alone for the meeting, 27% have met more than six persons, and 9% met someone who introduced himself/herself as a child on the Internet but turned out to be an adult.

Thanks to the invented technologies on earth, media in general and social media in particular created best suited situation on internet for many fellows of different programs including university one to have relationships, communication and discussions directly with their friends. According to Internet World Statistics Report (2012) the population of Ethiopia has reached 87,302,819, out of which the internet users are 960,331 which means 1.1% of the population. Surprisingly blue book users have reached 902,440 with 1% penetration rate.

According to the researcher observation at different corners of Hawassa University many people on the university use Facebook and other pimpall sites on Wi-Fi places of the university and internet cafes for different reasons. Out of their deeds: posting erotic photos, upload and download any videos including porno films, chatting with different peoples including sexual issues and use as a room to appoint one for further face to face contact with whom they get through online.

Generally, standing from the above different studies and findings one can understand that adolescent's sexual behavior depends on how they are socialized from different agents such as the parental role, peer pressure, school setting and both the traditional media and the newly emerged social media. Thus, in order to generate further information on risk and protective factors related sexual behavior and practices, this descriptive cross-sectional study was carried out to examine the determinants of risky sexual behavior in line with social media usage in the case of Hawassa University School of Informatics students.

LITRATURE REVIEW

Social media usage in Ethiopia

Ethiopia became an information technology society by setting up the Ethio telecom computer network in 1997. The first Internet Service Provider (ISP) started to provide public access to the country in 1997 (Lishan, 2010). Several Internet cafes subsequently emerged, thereby increasing the popularity of the Internet (Tsfaye, 2013). Computers and the Internet play a vital role in modern living, such as for communication, information searching, and business activities. Consequently, there has been a well-documented increase in installing Internet-ready computers in Ethiopian homes, offices, places of education and Internet cafes, in just the past few years. In addition, the distribution of Internet enabled cell phones contributed to an increase in Internet users in the urban areas of the country (Ethio telecom, 2013).

However, it is very difficult to find the exact time of the introduction of social media in Ethiopia. Regarding this, some reports stated that after the Internet service was introduced in to the country, some urban residents started using some social media sites (allafrica.com, 2013). Nevertheless, after the expansion of telecom services in the last ten years specifically in the coverage of Internet and the distributions of Internet enabled cell phones had a great contribution to increase the number of social media users in the country. According to the sole telecome provider, the Ethiotelcom, the number of Internet subscribers in the country reached 4.6 million by the end of 2012/13 (Ethio telecom, 2013).

Tsfaye (2013) also stated that the introduction of one of the most popular social media site in 2004 called Facebook and its accessibility and attraction has played a great role, particularly on youth. The innovation resulted in narrowing the geographical gap between people that live at different places and its access to communicate information much faster than any other medium in the country. It also allows the people to find out the latest events and news supported by motion or still picture, voice or text (Tsfaye, 2013).

The emergence of social media in Ethiopia changed many aspects of relationships and communication. Besides, it became a preferred way of communication and relationship by urban youngsters (Gedion, 2011). According to Gedion (2011) an increasing number of people, primarily the people living in Addis Ababa are engaging in these social networking activities. In addition, the usage of social media sites has changed many aspects of their communication and relationship.

Nevertheless, the number of Internet users in Ethiopia is very few compared to the population size. This could partly be attributed to the limited Internet service available compared to other countries, its cost and the high price of devices which help to access Internet services. Regarding this some foreign studies reported that the number of Internet users in Ethiopia is insignificant even compared with other African countries (allafrica.com, 2013).

New Trends in Social Media and Their Link with Risky Sexual Behavior

As we mentioned above the features in social media is changing from time to time and reach to the climax thanks to innovations that we are in with. The following lists of features in social media are well deployed and review tells they have positive correlation with the topic under investigation.

Chat Rooms

Chat rooms appear to be highly sexualized environments (Hinduja & Patchin, 2006). In an early analysis, it was found that a sexual comment was made every four minutes in a sample of 321 minutes of conversation from college chat rooms, observed during after-school and weekend hours. This is roughly three times the frequency with which sexual content was likely to appear on television in 1997-1998 (among shows that contained any sexual content).

Sexual Solicitation

Another way in which youth may encounter sexual information online is through experiencing sexual solicitations or witnessing them. Unwanted online sexual solicitation is defined by most research as the act of encouraging someone to talk about sex, to do something sexual, or to share personal sexual information even when that person does not want to. Solicitations have received a great deal of public attention, largely because of fears that they may result in the rape or abduction of adolescents by adults (Sponsil & Gitimu, 2012). As a result, the literature focuses primarily on determining the likelihood of these risks. It is important to note that more benign solicitations (e.g., solicitations between acquainted same-age youth) may also be of research interest.

Sexting

New phenomenon in social media and it is to mean sending sexual messages and photos of oneself. It may be considered as an extension of behavior that was equally common place but involved paper and pencil or telephone audio in the past, although text messaging may be increasing the prevalence of sexually suggestive communication between sex partners, friends, and acquaintances (Sponsil & Gitimu, 2012). The ubiquity of cell phone ownership among youth, ease of communication, and the apparent tendency to be more disclosing via relatively impersonal digital media could certainly lead to the latter. Available data make it difficult to assess this, since no historical information on sexual messages between teens was published prior to the wide availability of the Internet and text messages.

Pornographic Web Sites

Obvious to find many youths while accessing pornographic websites in different corners of the world. A broad literature has examined the influence of pornography exposure on young adults, using both correlational and experimental designs. These studies have, for the most part, looked at traditional media, such as films and magazines, and focused on young. Nonetheless, they suggest the range of effects that one might expect to observe among adolescents exposed to pornography on the Internet. Brown and Engle (2007) found that those exposed to pornographic materials through a variety of media (including Internet pornography and traditional media) were subsequently more likely to report permissive sexual attitudes (e.g., acceptance of casual or premarital sex) and to have oral or vaginal sex than youth with less exposure. The study used a particularly strong longitudinal survey design, reducing the likelihood that permissive attitudes led to interest in pornography, rather than the reverse.

Thus, the seeking of pornography on the Internet especially through wide range of social media tunes may have its own share on gearing university youths towards risky sexual behavior.

Internet Dating, Sex Seeking and Hook-up Sites

While the literature on mainstream social media (MSM) use and sexual risk behaviors emerges, research on online partner-seeking via dating, "sex seeking" and "hook up" sites is more established. This is especially true for research on the sexual risk behaviors of MSM who have used the internet for partner seeking since the early 1990s. SNS designed for partner-seeking among MSM have grown popular because they give users the ability to (a) conveniently and quickly locate sexual partners, (b) sort opportunities for sex by partner characteristics and preferences, (c) control information about sexual preferences and behaviors and (d) engage with a community of similar individuals that can provide social support free from stigmatized reactions from friends and family.

Another study by Mustanski et al. (2007) found that meeting a sex partner online was not associated with increased unprotected anal intercourse (UAI) among young MSM recruited using snowball sampling in a large Midwestern city.

Beuermeeister et al. (2008) grouped young MSM who used the internet to seek partners by number of romantic versus casual partners sought online (high romantic/high casual, low romantic/high casual, etc.) and found that the high romantic/high casual group were more likely to engage in unprotected anal intercourse (UAI) than any other group.

RESEARCH METHODOLOGY

Research Design

The central purpose of this study was to examine the determinants of risky sexual behavior in line with social media usage in the case of Hawassa University School of Informatics students. In doing so, the study employed mixed qualitative and quantitative approaches with descriptive cross-sectional survey research design. The main reason for the use of this approach was to get holistic understanding about the issue under investigation.

Target population of the study

The target population of this study was regular under graduate students of Hawassa University and both males and females were taken as participants. To be more specific, the participants were selected from the school of informatics namely: computer science, information technology and information and communication technology. As data secured from record office of the university reveals, the total number of students were 1072, of which 749 were males and the remaining 323 were females. The aforementioned figure entertains all students starting from year 1-4 in regular undergraduate program at school of informatics.

Sample and Sampling procedure

The study used multi stage sampling procedure to select sample respondents. Firstly, students of school of informatics of Hawassa university has been purposively selected out of many schools of the university since students of the school were closer to computer mediated programs, they attend most of the lessons on computer aided programs, they have better practitioners of social media, they have at least one social media account and they generally have better exposure and practices of social medias than other students in the university. Secondly, in order to select respondents, the students have been classified based on class year and department using stratified random sampling. Thirdly, having the total list of students from the school which the study was conducted, a systematic random sampling technique was deployed and 291 students which were enrolled in the school of informatics in 2016/17 academic year were secured as the study sample.

Therefore, in order to determine sample size a total of 1072 students (476 Computer Science department, 237 Information technology department and 359 information and communication technology department) enrolled in 2016/17 academic year in the school of informatics have been selected using sample size determination formula by Yamane (Yamane, 1967) as:

$$n = \frac{N}{1 + N(e)^2}$$

Where, n = Sample size
 N = Total population
 e = the level of precision
 Therefore

$$n = \frac{1072}{1 + 1072(0.05)^2}$$

n ≈ 291

Then, after having the sample size, by using stratified random sampling the participants of the study were stratified by subject of study and class year. Based on the strata, proportional sampling procedure was used. Proportional sampling of each class year was computed using proportional allocation method.

$$ni = \frac{n \times Ni}{N}$$

Where, ni = sample of strata
 n = Total sample size of all strata
 Ni = Population of each strata
 N = Total population

Therefore

$$ni = \frac{291 \times 201}{1072}$$

n ≈ 55

Table 1: Sample respondent’s distribution

No	Department s	Year								Total	
		Year I		Year II		Year III		Year IV			
		Pop n	Sampl e	Pop n	Sampl e	Pop n	Sampl e	Pop n	Sampl e	Tota l	Sampl e
1	Computer Science	201	55	172	47	56	15	47	13	476	130
2	IT	79	21	67	18	36	10	55	15	237	64
3	ICT	129	35	137	37	41	11	52	14	359	97
	Total	409	111	376	102	133	36	154	42	1072	291

As a result by taking the above formula in to consideration, the researcher select 291 students from three departments as a sample respondents and proportionally distributed 130forcomputer science department(55 from year I, 47 from year II, 15 from year III and 13 from

Year IV), 64 for Information technology department(21 from year I, 18 from year II, 10 from year III and 15 from Year IV) and 97 for Information and communication technology department(35 from year I, 37 from year II, 11 from year III and 14 from Year IV). Out of 291 samples 204(70%) were males and the rest 87(30%) were females.

Beside to quantitative data qualitative data was used to substantiate what is observed from quantitative data. The researcher selected 6 key informants(1 head of school of informatics, 3 department heads, 1 head of student council and 1 Gender and HIV AIDS Directorate director)purposively based on experience and knowledge on the topic under investigation.

Data Processing and Analysis

During data analysis both descriptive and inferential statistic were used.

Results of Study

Demographic features of participants

In this sub section participants provided basic demographic features such as sex, age and religious status. The results are summarized as follows.

Table 2: Background characteristics of sample respondents

Characteristics	Frequency	Percentage
Sex of respondents		
Male	188	69.9
Female	81	30.1
Age of respondents		
16-18 years	42	15.6
19-21 years	156	58.0
22-24 years	71	26.4
Religion of respondents		
Orthodox Christian	138	51.3
Islam	38	14.1
Protestant	78	29.0
Catholic	8	3.0
Others	7	2.6

With regards to respondents' sex, of the total respondents, 188(69.9 %) were males and the rest 81(30.1%) were females. From this result we can conclude that majority of sample respondents were males.

Age is another demographic variable and in this respect, the majority(58.0%) of sample respondents were found in the age group that range between 19 -21 years, followed by 26.4% respondents found between 22-24 years and 15.6% between 16-18 year. The result indicates majority of the respondents were youngsters whose age below 20 years.

Regarding religious status of respondents, majority of the respondents (51.3%) were followers of orthodox Christian and followed by 29.0%, 14.1 %, 3.0 % and 2.6 % were protestant, Islam, catholic and others, respectively. Thus, the result shows that majority of the respondents in the study area were orthodox Christians.

Determinants of risky sexual behavior in line with social media utilization

The multiple regression analysis was conducted using the hierarchical regression method to investigate the influence of independent variables on the dependent variable and the result depicted significant influence; i.e., independent variable(sex, age, religion, department, year, place of origin, frequency of using SM per week, purpose of using SM, place of using SM and time of using SM.) to

the dependent variable – risk sexual behavior. The proposed hypotheses were tested using multiple regression analysis and the results are presented on Table 5.

In this section, determinants that affect risky sexual behavior of students have been examined by estimating linear regression model. The dependent variable against ten independent variables was investigated. In examining the factors that could determine risky sexual behavior of students, the researcher used a regression analysis to test the effect of ten independent (explanatory) variables on the dependent (explained) variable i.e. risky sexual behavior. And it has been found out that the risky sexual behavior is a function of sex, age, year, place of origin and time of using SM. However, to show how well the model containing those of ten explanatory variables actually explains the variations in the dependent variable.

Table 3: Testing the model through ANOVA (Goodness of fit statistic)

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	77.009	10	7.701	3.057	.001 ^b
Residual	649.851	258	2.519		
Total	726.860	268			

a. Dependent Variable: risky sexual behavior

b. Predictors: (Constant): sex, age, religion, department, year, place of origin, frequency of using SM per week, purpose of using SM, place of using SM and time of using SM.

Table 3, summarizes the information about the variation of the dependent variable explained by the existing model used for this study and the residual that indicates the variation of the dependent variable that are not captured by the model. It is observed that the independent variables give a significant effect on the dependent variable, where F-value is 3.057 with a p-value less than 0.05 (i.e. $p < 0.000$) indicating that, over all, the model used for the study is significantly good enough in explaining the variation on the dependent variable.

To ensure the statistical adequacy of the model, the goodness of fit can also be measured by the square of the correlation coefficient also called R^2 .

Table 4: Goodness of fit through R Square

Model	R	R square	Adjusted R Square	Std. Err
1	0.675a	0.816	0.710	0.62887

Predictors: (Constant): sex, age, religion, department, year, place of origin, frequency of using SM per week, purpose of using SM, place of using SM and time of using SM.

As shown in the Table 4 above, both R^2 and adjusted R^2 measure the fitness of the model i.e. they measure the proportion of the variation in dependent variable explained by the model. But since adjusted R^2 is the modification for the limitation of R^2 , the value of the adjusted R^2 is considered to measure the fitness of the model. Thus, as it is shown on table 4, the value of adjusted R^2 is 0.71, indicating that; the independent variables in the model are explaining 71% variation on the dependent variables. Thus, we can understand that the model of the study is providing a good fit to the data. This outcome empirically indicates that the independent variables in this study are the major determinants of the risky sexual behavior of the students in the study area.

Table 5 below shows the results of the regression model. The result reveals that, religion, department, frequency of using SM per week, purpose of Using SM and place of Using SM were insignificant. Whereas, there exists a significant relationship between independent variables such as sex, age, year, place of origin and time to use SM and dependent variable, i.e. risky sexual behavior.

Table 5: Regression Analysis on Determinants of Social Media Usage Related Factors on Risky Sexual Behavior of Students

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	4.460	.712		6.266	.000
Sex	-.360	.226	-.100	-1.592	.011**
Age	-.710	.166	-.276	-4.281	.000**
Religion	-.004	.094	-.003	-.048	.962
Department	-.218	.112	-.116	-1.955	.052
Year	.189	.098	.121	1.931	.035**
Place of Origin	.356	.222	.104	1.605	.010**
Frequency of using SM per week	-.088	.114	-.047	-.773	.440
Purpose of Using SM	-.056	.047	-.073	-1.179	.240
Place of Using SM	.080	.120	.041	.668	.505
Time of using SM	-.135	.074	-.116	-1.825	.019**

* Refers to statistically significant results

a. **Dependent Variable:** risky sexual behavior

b. **Predictors:** (Constant):sex, age, religion, department, year, place of origin, frequency of using SM per week, purpose of using SM, place of using SM and time of using SM

As shown in Table 5, of ten explanatory variables tested in this study, sex (p-value = 0.011), age (p-value=0.000), year (p-value=0.035), place of origin (p-value=0.010) and time of using SM (p-value=0.019) were statistically significant at 5 percent or lower.

The result implies that sex, age, year, place of origin and time of accessing SM are the significant determining factors in line with SM usage that trigger students for being in the middle of risky sexual behavior.

Consistent with the finding obtained from quantitative data, information obtained from key informants reveals that sex, age, time of accessing SM are the determining factors that trigger students for being in the middle of sexual behavior.

CONCLUSIONS

- ❖ Entertainment, communication with other people and making companionship respectively were the major reasons that motivate school of informatics students to access SM.
- ❖ Facebook site is the one which has a frequent knocker among the lists by school of informatics students.
- ❖ Sex, age, year, place of origin and time of using SM determine the dependent variable – risky sexual behavior.

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