

Assessing the Influence of Social Networking Material on Adolescents' Sexual Behavior in Kampala

Ritah Nagaddya¹, Sylvia Kiconco¹, Alimah Komuhangi¹ Pardon Akugizibwe¹ Christine Atuhairwe¹
 1. International Health Sciences University, P.O.Box7782 Kampala, Uganda

ABSTRACT

Background: Social media has been used to promote risky sexual behavior in form of unsolicited photos, videos and text from peers and strangers that is not regulated by parents or guardians. Therefore, it's important to investigate the influence of social networking material on adolescents' sexual behavior in Ugandan in order to close the knowledge gap. Adolescents in Uganda may be at risk of indulging in risky sexual behavior if usage of social networking sites remains unrestricted.

Methods: A cross sectional study was conducted among 280 randomly selected adolescents in Kampala between August and October 2016.

Results: Majority (68.9%) of the respondents thought that messages, photos, videos with sexual content shared/posted on social networking sites, changed their sexual behavior. Variables that were found to significantly explain the effect of exposure of social network content on adolescent sexual behavior, among adolescents included: Gender (male) (OR 2.646, 95% CI 1.088-6.434, use of social networking sites during holidays (OR 2.581, 95% CI .836-7.965) and social sites being used for leisure activities (OR 4.516, 95% CI 1.232-16.548).

Conclusion: Parents may need to restrict access and use sexual content especially pictures and videos available on social networking site among the adolescents.

Key words: Adolescent, social networking sites, change, sexual behavior

Introduction

In Uganda, sexual risky behavior among adolescents is one of the key public health concerns, attributing to 24% of the teenage pregnancies (UDHS, 2011). The World Health Organization attributes sexual risky behavior among teenagers, as the leading cause of Uganda's abortion rates, which are higher than 18% in East African Sub region and ranks at 13% in the world. In addition, about 1,500 girls die from complications resulting from unsafe abortions due to unintended pregnancies in Uganda annually. During adolescence, a child experiences a sense of self- discovery due to the changes in his/ her body that necessitates the need to create a false identity. This aspiration has been made easy through the use of social networking sites/social media, which enables them to manipulate their online personification to fit the stereotypes (Effiom, 2013). Furthermore, social media has been used to promote risky sexual behavior in form of unsolicited photos, videos and texts from peers and strangers that are not regulated by parents or guardians a key driver of sexual risky behavior among adolescents (Bantebya et al., 2014).

Methods and materials

Setting and study population

A descriptive cross sectional design was used to collect data using a structured questionnaire. This study was conducted in two secondary school settings among adolescents aged 15-19 years with a sample of 280 students

Results

Of the 280 adolescent interviewed; 193(68.9%) reported that messages, photos, videos with sexual content shared/posted on social networking sites had caused a change their sexual behavior compared to 87(31.1%) who did not.

Demographic characteristics

Table 1 reveals that 116(60.1%) of the female compared 77(39.9%) males' change in sexual behavior had been influenced by social networking site. Gender was found to be influenced by unsolicited access to social networking site X^2 12.503; $p < .05$). With regards to age it was established that 42(21.8%) of adolescents aged 15-17 years compared to those above 18 years 63(32.6%) reported to have experienced change in sexual behavior. Thus age was found to significantly influence change in adolescent sexual behavior (X^2 6.7665; $p < .05$). The study findings show 72(37.3%) of the respondents were day scholars compared to 121(62.7%) who were not. Thus type of school was found to significantly influence change in adolescent sexual behavior (X^2 7.591; $p < .05$).

The influence of using Social Networking Site

Table 2, 115(59.6%) compared to 63(72.4%) of the adolescent twitters reported to have experienced change in their adolescent sexual behavior. The study established that use of twitter social networking application had a strong significant association with change in adolescent sexual behavior (X^2 4.261; $p < .05$). 192(69.8%) vs. 83(30.2%) of the adolescent who accessed social networking sites for home reported a change on their sexual behavior (X^2 5.691 $p < .05$). 41(82.0%) vs. 9(18.0%) of the adolescents who accessed social networking sites daily reported a change in their sexual behavior. Thus, daily usage of social networking sites was found to have a strong significant association with change in adolescent sexual behavior (X^2 4.856 $p < .05$). 100(60.6%) compared to 65(39.4%) who used social networking sites during the holidays reported a change in their sexual behavior (among adolescents (X^2 12.992, $p < .05$).

The influence of video content shared on social networking sites

When the effects of video contents shared on social networking sites were analyzed (table 3) it was revealed that; 49(81.7%) of the adolescent who had shared pornographic video experienced a change in sexual behavior compared to only 11(18.3%) who did not. 127(87.0%) of the adolescent that had been aroused by watching pornographic videos. Thus watching pornographic videos was found to significantly influence adolescent sexual behavior (X^2 46.449, $p < .05$). 109(79.6%) of the adolescents who had watched pornographic materials had the urge to carry out what they had seen (X^2 14.162, $p < .05$). 28(96.6%) of the adolescents reported that they started masturbating as a result of watching pornographic videos. The study findings established that after watching a pornographic video, some adolescents started looking for means of meeting a partner to have sex, when they failed, they resorted to masturbating (X^2 11.526, $p < .05$). However some of the adolescents that 92(82.9%) thought it was normal to watch pornographic videos. Finally the adolescents who thought watching pornographic videos was normal/casual was found to have changed their sexual behavior (X^2 16.721 $p < .05$).

The influence of peers and advertising sex related products on social networking sites

138(75.0%) of the adolescents who had joined social media because their friends had already joined and did not want to be left out reported to have had change in sexual behavior while 46(25.0%) disagreed (X^2 9.237, $p < .05$). 100 of 131(76.3%) of the adolescent agreed to the fact that they commented on received/posted messages/pictures/photos because their friends had done so while 31(23.7%) disagreed (was found to significantly influence adolescent sexual behavior (X^2 6.307, $p < .05$). 34(82.9%) compared to 7(17.1%) of the respondents agreed that they have ever sent a photo with fewer clothes than usual to a lover, because he/she asked for it. The sharing of semi-nude photos with peers through social media was found to significantly influence change in adolescent sexual behavior (X^2 4.395, $p < .05$).

Furthermore, posting a photo with less clothes than usual to a lover, was found to significantly influence change in adolescent sexual behavior (X^2 4.395, $p < .05$). 83(77.6%) compared to 24(22.4%) of the adolescents that shared on sexual matters reported a change in behavior. Talking of sexual issues with friends via social media was found to significantly influence change in adolescent sexual behavior with X^2 6.038, $p < .05$). 70(82.4%) of the adolescents who had been influenced to be sexually active reported a change in sexual behavior compared to 15(17.6%) who did not (X^2 10.27 $p < .05$). 54(94.7%) of the adolescents that had ever been influenced by condom adverts on social media reported a change in behavior (X^2 22.258, $p < .05$).

Multivariate Analysis of the exposure to social networking sites material

Using the Binary Logistics regression model the effects of exposure to social networking sites material on adolescent sexual behavior were: Gender (male) (OR 2.646, 95% CI 1.088-6.434), using of social networking sites during holidays (OR 2.581, 95% CI .836-7.965) and social sites being used for leisure activities (OR 4.516, 95% CI 1.232-16.548).

Discussion

Demographic characteristics influencing adolescent sexual behavior

Adolescent is a transition point from childhood to adulthood, it involves experiencing physical and emotional changes. Asrat (2014) concurs with above in his study on the assessment of sexual risk behaviors in schools were it was established that it's during adolescence that individuals begin to pick interest in exploring and experimenting sexual relations.

The study findings revealed that the sexual behavior of male students were 2.6 times more likely to change due to contents viewed on social networking sites than their female counterparts (OR 2.646, 95% CI 1.088-6.434). In a study on male Swedish high school, it was revealed that, frequent viewing of sexually explicit material could

create a more stimulating sex life among male viewers (Owen et al., 2012). When not at school, the day scholars have more liberty to access social networking sites and are able to view different kinds of illicit materials than their counterparts in boarding schools. This concurs with findings of Asrat, 2014, who revealed that, a place where an adolescent stays while studying, may have an influence on his/her adoption of risky sexual behavior.

The influence of using Social Networking Sites on adolescent sexual behavior

The study established that adolescents spent more time twitting predisposing them to engage in risky sexual behavior. In-line with this, a study conducted in U.S by Bryant et al., 2014, on assessing the impact of social media on the risky sexual behaviors of students, revealed that premature sex was associated with social media sites like Twitter and You Tube. Place of accessing social networking sites was strongly associated with change in adolescent sexual behavior. A study by Jeckoniah et al., 2015 revealed that most adolescents who accessed social networking sites from home obtained internet bundles from their parents who were not suspecting of the type of content accessed on social networking sites.

The study findings showed that daily usage of social networking sites like U-tube the enticed adolescents with sex contents increased the risk of sexual behavior. A study conducted by the Kaiser Family Foundation, affirmed that 11-to-18 year olds spend on average 27 minutes daily visiting social network sites, which is more than a quarter of their computer use per day (Rideout et al., 2010). Daily use of social media has rising concerns, for example: adolescents are inexperienced and have limited capacity for self-regulation; they may not understand fully the repercussions of internet use to learn of sex, they could get addicted and be at risk as they experiment with social media (O'Keeffe et al., 2011).

The influence of video content shared on social media on adolescent sexual behavior

Adolescents' urge to learn about sexuality increases exposure to sexually illicit material. This is consistent with the finding in a study by Peter and Valkenburg (2008b) that showed a relationship between adolescents' exposure to sexually illicit materials and positive attitudes towards engaging in uncommitted sexual exploration. A study by Houck et al., (2013), confirmed that, the sexual text messaging behavior among students, whether with or without pictures was associated with greater likelihood to engage in sexual activities. It was established that receiving a pornographic video on social media from a friend whom they had never met offline was found to be significantly associated with adolescent sexual. A study in Sweden while examining the sex lives and pornography consumption of high school students revealed that having sexual intercourse with a friend was associated with frequent exposure to sexually illicit material (Owen et al., 2012). Therefore, exposure to sexually explicit material was found to increase the likelihood of adolescents accepting and engaging in sexually permissive behaviors (Braun-Courville and Rojas (2009).

This is in line with a study in Taiwan of 2,001 students that revealed that a relationship between adolescents' exposure to sexually illicit materials and their positive attitudes toward premarital sexual relations (Lo and Wei's, 2005). Finally, watching pornographic videos and thinking it was normal/casual is consistent with a study in US, by Braun-Courville and Rojas (2009) that found out that adolescents that were more frequently exposed to sexually explicit material, were more likely to accept the notion of casual sex.

The influence of peers and advertising in social networking sites

The findings revealed that among those who agreed that they joined social media because of their peers and they did not want to be left out. Peers have significant influences on their friends' behavior especially with regard to sex (Cherie et al., 2012). Adolescents usually do not want to be left out and this influences change in their sexual behavior. This is because Adolescents use social media to monitor the social status of their friends (Markwei et al., 2016). Therefore they end up copying characters of their friends while online thus influencing change in their sexual behavior. In 2009, Brown and L'Engle's, revealed that early exposure to sexually illicit material increases the likelihood for adolescents to engage in oral sex and sexual intercourse earlier than their non-exposed peers. Social media users, especially girls select and post pictures in which they look attractive (Siibak, 2009). Talking of sexual issues with friends via social media among adolescents is perceived as being involved in sexual relationships are more likely to report risky sex behavior (Cherie et al., 2012).

Strengths and limitations

This study utilized primary data therefore results were not affected by issues related to missing data. Findings however, may not be generalized to a rural secondary school population. Another setback in this study was the exposure and outcome was self reported which could have underestimated the influence of social media material on sexual behavior.

Conclusion

Adolescents access social networking site by mobile phones at home with minimal or no parental restrictions

thus increasing chances for exposures to sexually illicit materials. It was also evident that social networking sites' materials (messages, videos, pictures, adverts that are sexually suggestive and peer influence) played a major role in changing the sexual behavior of Ugandan adolescents.

Acknowledgements

The authors would like to acknowledge the management of International Health Sciences University, Nabisunsa Girls School and Kyambogo College School, staff and students who facilitated in the data collection process.

References

1. Asrat, A. (2014). Assessment of Sexual Risk Behaviors of In-School Youth: Effect of Living Arrangement of Students; West Gojam Zone, Amhara Regional State, Ethiopia. *American Journal of Health Research*. 2(2)78-83
2. Brown J.D, L'Engle KL, Pardun CJ, et al.,. Sexy media matter: Exposure to sexual content in music, movies, television, and magazines predicts black and white adolescents' sexual behavior *Pediatrics*. 2006;117(4):1018-1027
3. Bryant, C. Chavious, M, (2014). Assessing the Impact of Social Media on the Risky Sexual Behaviors of College Students, Tuskegee University, USA.
4. Cherie .A, Berhane .Y, Peer Pressure Is the Prime Driver of Risky Sexual Behaviors among School Adolescents in Addis Ababa, Ethiopia, <http://dx.doi.org/10.4236/wja.2012.23021> Published Online September 2012 (<http://www.SciRP.org/journal/wja>), Accessed on 18/08/2016.
5. Effiom P. Ephraim, African youths and the dangers of social networking: a culture-centered approach to using social media, Nov.2013
http://www.academia.edu/12909759/African_Youths_and_the_Dangers_of_Social_Networking_A_Culture_centered_Approach_to_using_social_media Accessed on 02/08/2016
6. Hinduja S, Patchin JW. Personal information of adolescents on the Internet: A quantitative content analysis of MySpace. *Journal of Adolescence*. 2008; 31(1): 125-146 <http://www.phi.org/uploads/application/files/g9g6xbfgdhxoe3yytmc1rfvvm8lt1ly9sr3j369pstkojldly15.pdf> Accessed on 08/08/2016.
7. Hinduja, S. & Patchin, J. (2011). Electronic dating violence: A brief guide for educators and parents. Cyberbullying Research Center. Available at: www.cyberbullying.us. Accessed on 13/08/2016
8. Houck. D.C.,Barker. D,Rizzo. C., Hancock. E., Norton. A.Brown. L.K, Sexting and Sexual Behavior in At- Risk Adolescents. *Journal of Pediatrics*. 2013; 133 (2) www.pediatrics.org/cgi/doi/10.1542/peds.2013-1157, Accessed on 15/08/16.
9. Jeckoniah J.N, Paul .D.(2015). Assess to Social Media and Sexual Behavior among Adolescents: A Case of Selected Secondary Schools in Morogoro, Tanzania. *International Journal of Education and Research* Vol.3 (1) Pp4-6. Accessed on 19/09/2016
10. Lo, V.-H., & Wei, R. (2005). Exposure to Internet pornography and Taiwanese adolescents' sexual attitudes and behavior. *Journal of Broadcasting and Electronic Media*, 49, 221–237
11. Markwei, Evelyn D. and Doreen Appiah. The Impact of Social Media on Ghanaian Youth: A Case Study of the Nima and Maamobi Communities in Accra, Ghana. *Journal of Research on Libraries & Young Adults* 7 (2016):
[//Users/simon/Documents/The%20Impact%20of%20Social%20Media%20on%20Ghanaian%20Youth:%20A%20Case%20Study%20of%20the%20Nima%20and%20Maamobi%20Communities%20in%20Accra%20Ghana.pdf](http://www.webarchive.org/wayback/20160912100000/http://www.users.simon.com/Documents/The%20Impact%20of%20Social%20Media%20on%20Ghanaian%20Youth:%20A%20Case%20Study%20of%20the%20Nima%20and%20Maamobi%20Communities%20in%20Accra%20Ghana.pdf). Accessed on 12/09/2016.
12. O'Keeffe G.S. Pearson K.C., Council on Communications and Media, The Impact of Social Media on Children, Adolescents and Families, April 2011 <http://pediatrics.aappublications.org/content/127/4/800>, Accessed on 15/6/2016
13. Owens E.W, Behun R.J, Manning J.C, Reid R.C, The Impact of Internet Pornography on Adolescents: A Review of the Research, 2012.
14. Rideout, V.J., Foehr, U.G., Roberts D.F., 2010. Generation M: Media in the lives of 8-to 18- year-olds. Henry J. Kaiser Family Foundation. <http://www.eric.ed.gov/PDFS/ED527859.pdf> (accessed 05/08/16).
15. Siibak, A., 2009. Constructing the self through the photo selection - visual impression management on social networking websites. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*. 3(1). <http://cyberpsychology.eu/view.php?cisloclanku=2009061501&article=1> (accessed 15.09.16)

Appendix: Tables

Table 1: Demographic factors associated with change in Adolescent Sexual Behavior

Variables	Influenced change in Adolescent Sexual Behavior		Chi-square	P-Value
	No	Yes		
Gender				
Male	16(18.4)	77(39.9)	12.503	.000
Female	71(81.9)	116(60.1)		
Total	87	193		
Age-group				
15-17 years	65(74.7)	113(58.5)	6.765	.009
Above 18 years	22(25.3)	80(41.5)		
Total	87	193		
Religion				
Catholic	15(17.2)	39(20.2)	.742	.863
Protestant	39(44.8)	90(46.6)		
Muslim	29(33.3)	57(29.5)		
Others	4(4.6)	7(3.6)		
Total	87	193		
School type				
Day	18(20.7)	72(37.3)	4.856	.028
Boarding	69(79.3)	121(62.7)		
Total	87	193		280

Level of significance,* p -value < 0.05

Table 2: The influence of use of Social Networking Sites among adolescents sexual behavior

Variables	Influenced change in Adolescent Sexual Behavior		Chi-square	P-Value
	No	Yes		
Social Networking sites known				
WhatsApp	81(93.1)	182(94.3)	.151	.698
Face book	84(96.6)	187(96.9)	.022	.882
Twitter	63(72.4)	115(59.6)	4.261	.039*
Instagram	49(56.3)	122(63.2)	1.198	.274
Others	59(67.8)	113(58.5)	2.173	.140
How many sites are used actively				
Only one site	14(16.1)	42(21.8)	1.676	.433
Two sites	27(31.0)	63(32.6)		
More than two sites	46(52.9)	88(45.6)		
Total	87	193		
Place of accessing social networking sites				
At home	83(30.2)	192(69.8)	5.691	.017*
School computer lab	23(32.4)	48(67.6)	.078	.780
Public café	9(25.0)	27(75.0)	.711	.399
Frequency of use-social networking sites				
Daily	9(18.0)	41(82.0)	4.856	.028*
Once a week	10(24.4)	31(75.6)	1.001	.317
One month	6(19.4)	25(80.6)	2.234	.135
Every day during holidays	65(39.4)	100(60.6)	12.992	.000*
Platforms to access social networking sites				
Mobile phone	82(30.3)	189(69.7)	2.603	.107
Laptop	41(31.5)	89(68.5)	.025	.875
Desktop computers	20(29.4)	48(70.6)	.116	.734
Ipad	25(29.4)	60(70.6)	.157	.692
Total	87	193		280

Level of significance,* p -value < 0.05

Table 3: The influence of sex video content shared on social networking sites on adolescent sexual behavior.

Variable	Influenced change in Adolescent Sexual Behavior		Chi-square	p-value
	No	Yes		
1. I have ever been asked for an intimate relationship from a friend after sharing their pornographic videos.	11(18.3)	49(81.7)	5.785	.016*
2. When I watch a pornographic video, I feel sexually aroused.	19(13.0)	127(87.0)	46.449	.000*
3. After watching a pornographic video, I start having thoughts of myself doing the same	28(20.4)	109(79.6)	14.162	.000*
4. After watching a pornographic video, I look for means of meeting a partner and have sex, when I fail, I masturbate.	1(3.4)	28(96.6)	11.526	.001*
5. Am used to watching pornographic videos, that I take all actions in them to be normal/casual.	19(17.1)	92(82.9)	16.721	.000

Level of significance, p-value < 0.05*

Table 4: The effects of peer influence and advertising in social networking sites on adolescent sexual behavior

STATEMENT	Influenced Adolescent Sexual behavior		Chi-square	p-value
	No	Yes		
1. I actually joined social media, because my friends had already joined and I did not want to be left out.	46(25.0)	138(75.0)	9.237	.002*
2. Most of the time, I comment on received/posted messages/ pictures/ photos because my friends have done so.	31(23.7)	100(76.3)	6.307	.012*
3. I got a lover because all my friends on social media have them.	5(17.2)	24(82.8)	2.889	.089
4. I have ever sent a photo with less clothes than usual to my lover, because he/she asked for it.	7(17.1)	34(82.9)	4.395	.036*
5. I always talk about issues concerning sex with my friends via social media.	24(22.4)	83(77.6)	6.038	.014*
6. I have ever been influenced to be sexually active by my friends on social media.	15(17.6)	70(82.4)	10.270	.001*
7. I have ever been influenced by adverts of sexual items like condoms on social media to have sex	3(5.3)	54(94.7)	22.258	.000*
8. My friends think, it's normal to date a stranger on social media, for as long as, his/her pictures looks nice.	68(30.5)	155(69.5)	.171	.679

Level of significance, p-value < 0.05*

Table 5: Results of Multivariate Logistic Regression Analysis

Variable	OR	95% C.I. for OR	
		Lower	Upper
Gender(Male)	2.646	1.088	6.434
Social Networking sites			
a_whatsup	1.845	.605	5.629
b_facebook	1.381	.313	6.099
d_instagram	1.785	.984	3.238
Other sites	Ref.		
Number of actively used social sites			
Only one site	1.979	.924	4.235
Two sites	1.236	.691	2.213
More than two sites	Ref.		
When social networking sites are accessed			
During holidays	2.581	.836	7.965
Others	Ref		
Leisure with friends when alone	4.516	1.232	16.548
Others	Ref.		