

Gender Variations in Adolescents' Social and Moral Development via Social Networking Sites: The more I surf, the less moral and social I become

BIBIRE, Abdulkareem Hussein Ph.D.

Department of Psychology, Nigeria Police Academy, Wudil, Kano State, Nigeria
Bibirehussein2013@gmail.com

SURAJU Adewale Ramoni Ph.D.

Department of Economics and Management Science, Nigeria Police Academy, Wudil-Kano

OLUWAFEMI, O. Odunayo

Department of Psychology, Nigeria Police Academy, Wudil, Kano State, Nigeria

ONYINYE IGBOANUSI-OSSAI

Department of Psychology, Nigeria Police Academy, Wudil, Kano State, Nigeria

Abstract

This study examined gender variations in adolescents' social and moral development via social networking sites in Kano State metropolis. Factorial design was adopted while stratified sampling technique was used to select 10 secondary schools and proportionate sampling technique was used to select 262 respondents. An adapted questionnaire on social networking sites via social and moral development of adolescents was used; Validity and reliability index was .71. Results showed that there were both significant main and interaction effects of social networking sites usage and gender on social development of adolescents; there was a significant main effect of social networking sites usage for academic purpose on adolescents' social development; the interaction effect between gender and social networking sites for academic purpose on social development was not significant; there was a significant main effect of social networking sites usage for academic purpose on adolescents' moral development; there was a significant main effect for gender, and there was no interaction effect between gender and social networking sites usage for academic purpose on adolescents' moral development. It was recommended that adolescent students irrespective of their gender should make use of social networking sites for academic purpose in order to aid their social and moral developments.

Keywords: Adolescents, Gender Variations, Social Networking Sites, Social and Moral Development

1. Introduction

The role of social networking in the development of every individual cannot be over emphasized. It plays a vital role in the development of moral, social, intellectual, cultural, economical and political aspects of human's life. Social networking sites such as Facebook, Youtube, Twitter, Whatsapp, Videogames, among others have been considered as integral parts of human social and moral development. These sites are deeply ingrained into individuals' daily life activities, most especially youths and adolescents. It has been established by several research findings that roughly 87% now a day adolescents spend most of other time visiting social networking sites. Social networking has become extremely popular in our recent society, something we cannot reject but accept and it is commonly used by adolescents in this current generational trend.

The introduction of information technology sites has brought a lot of significance changes in people's life. Technology is continuously re-shaping peoples thought, experience, orientation, liberation, exposure, and even knowledge in general. It is also challenging the process of teaching and learning activities which are well structured and delivered (Misty, 2011). Social networking sites are described as web-based services that allow people to construct a public or semi-public profile within abounded system; articulate a list of other users with whom they share a connection; and view and traverse their list of connections and those made by others within the system (Boyd & Ellison, 2008). The nature and nomenclature of these connections may vary from site to site (Dothan & Boyd, 2009). These enable and afford them to add friends, meet friend and communicate efficiently in various ways, for example, private messaging, public messaging and instead messaging among others. (Mwangi, 2013). The uniqueness of social networking sites is not only that they allow people to meet one another, but they enable users to

actualize and articulate at the same time thereby making visible their social networks. (Haythornwaite, 2005) Social networking sites have presently changed the way of human communications. They also become the source of change in different aspects, supplemented local social interaction and even deliberation on common interest; they have revolutionized people's interaction, communication and even the way they perceived ideas (Mwangi, 2013). Social networking sites have implemented series of technical features; their backbone consists of visible profiles that show an articulated list of colleagues who are also users of sites. Profiles in technological context are unique pages where a person can "type oneself into being" (Sudan, 2003).

Social networking sites have been the speeding means of communication and interaction among youths and adolescents, studies including Neckmalar and Chitra, (2009) affirmed that an average six to eight hours in a day adolescents around the globe visit social networking sites. According to Ashiekpe and Mateye (2017), social networking sites are the new channels of knowledge acquisition, participation, involvement, affiliation, interaction and collaboration among adolescents. Visiting the sites has been considered as a usual activity which in turns equally benefited the users by facilitating and improving effective communication, interaction, entertainment and technical skills among others (Olasinde, 2014). Social development involves learning the values, knowledge and skills that enable an individual to relate to others effectively and also contribute in positive ways to family, school and community. This kind of learning is passed on to individuals directly by those who care for and teach them, as well indirectly through social relationships within the family or with friends, and through children participation in the culture around them. Through their relationships with others and their growing awareness of social values and expectations, individuals build a sense of who they are and the social roles

available to them. As individual develops socially, they both respond to the influences around them and play an active part in shaping their relationships

Quantitative studies also converge with this findings that adolescents mostly use social network services to interact with friends and not to meet strangers (Agosto & Abbas, 2010). It is believed that adolescence is possibly the most essential time for social development in a person's life. In this period, adolescents learn to form and maintain intimate friendships and other essential social skills. These skills become vital in adolescents when peer groups become the primary resource for emotional support (Allen, Evans, Hare, & Mikami, 2010). Social networking sites provide numerous interactive platforms based on the objectives of the founders. For instance, social, political, academic, economic, sports, romantic and religious platform (Helen, Charles & Jennifer, 2014). The social networking sites by their nature are means of orienting enlightening, educating, informing, entertaining and inflaming the audience or general public. The ability of social networking sites has become an unfold tool for communication and exchange of ideas, helping individuals and organisations with just causes to reach a phenomenally vast audience that could hitherto not be reached by traditional or local media (Onomo, 2012).

In Nigeria, the number of social network users is on the high rate. According to social bakers, a Facebook statistics site, Nigeria rated 35th in the world in the number of Facebook users. According to the site, Facebook has an estimate of over 4 million Nigeria users, with the males dominating 65% while the females have 33% domination (Helen Charles & Jennifer, 2014) Various findings revolved that social media networking platforms provides greater learning and social interaction opportunities that improve the social and moral development of adolescents. It makes those who may otherwise be introverts to be confident and skillful. Conversely, social networking sites are 'hijacking childhood' by diverting attention and

concentration of adolescents from what will improve and enhance their social and moral development. Similarly, social networking sites are making today's adolescents narcissistic, prone to phobia and anxiety, depression and other anti-social and immoral behaviours (Buffardi & Campbell, 2008 cited in Ashiekpe & Majaye, 2017).

There are various findings on social networking sites and adolescents' moral development for instance, in the study conducted by Matsika (2012), indigenous education helps to read and interpret their experiences with societal customs. The education culminated in holistic knowledge which is not compartmentalized into theoretical and practical intellectual and emotional, secular and sacred or materialist and spiritual forms (Matsika, 2012 in Godfrey & Nisbert, 2014). In another words, the availability of information and communication technology has invariably presented an external point of control in such a way that local or urban adolescents' morals, attitudes and reactions are being shepherded by foreigners. Social Networking sites which adolescent students' access through numerous e-learning resources, has provided a yardstick or platform for them to buy into or acquire some morally detrimental moral ideas. Rukuni (2007) associated that Europe's moral libertinism, which predominates social networking has exerted external pressure and control on the behaviour and attitude of the adolescents.

The studies on social networking sites and gender have established divergent opinions and findings. For instance, Lin and Subrahmanyam (2007) found that there is a significant effect of social networking sites usage on interpersonal relationship (social development) of students based on gender. He stated that male adolescents always have been online more than their female counterparts in previous decade because of the earlier knowledge of technology forms, for instance, video and computer games. In contrary, female adolescents have been reported to use social networking sites for the purpose of chatting and downloading music than their male

counterparts (Giles & Price, 2008). More importantly, that there is a significant effect of social networking sites usage on social development of male college students, also shown that though females and males are both likely to have a social networking sites account; the purpose for these accounts may vary on the basis of gender disparity (Bounds-Raacke & Raacke, 2008). The purpose for female adolescents using social networking sites are majorly reinforce Pre-existing friendships, while for male, adolescents, the said networks also provide opportunities for friendship and making connections (Bounds-Raacke & Raacke, 2008).

Rafferty (2008) in his studies found that females are more likely than their male counterparts to post sexually explicit pictures of themselves and to talk about sexual activity in the public. In contrast, there is likelihood and tendency that male to create an account because they are trying to meet a significant other, or because they are already in a relationship with someone who has requested them to join (Bounds-Raacke & Raacke, 2008).

In the study of Merten and Williams (2009), it was found that females do always share personal information about their daily lives more than their male counterparts. They maintained further that 55% of females shared personal stories about depression, anxiety, personality disorders as well as relationship problems. In contrast, it was found that 15% of males shared any personal information apart from their hobbies, career choice, interest and friendships Peter and Valkenburg (2009) found that males become much more different from their female counterparts in social networking sites. As a result of the limitations observed in the past studies with particular reference to the variables covered, the area of their operation and sample size, and different findings to make up part of this study, this study therefore, examined gender variations in adolescents' social and moral development via social networking sites in Kano State Metropolis.

Purpose of the Study

The main purpose of this study is to establish gender variations in adolescents' social and moral development via social networking sites usage in Kano State metropolis. Specifically to examine:

- The interaction between gender and the usage of social networking sites on the social development among adolescent students in Kano State Metropolis
- The interaction between gender and the usage of social networking sites on the moral development among adolescent students in Kano State Metropolis
- The interaction between gender and social networking sites usage for academic purpose on social development among adolescent students in Kano State metropolis
- The interaction between gender and social networking sites usage for academic purpose on moral development among adolescent students in Kano State metropolis

Research Hypotheses

Four null hypotheses were formulated and tested to sharpen the focus of the study

Ho₁: There will be no interaction between gender and social networking sites usage on social development among adolescent students in Kano State, metropolis.

Ho₂: There will be no interaction between gender and social networking sites usage on moral development among adolescent students in Kano State, metropolis.

Ho₃: There will be no interaction between gender and social networking sites usage for academic purpose on social development among adolescent students in Kano State, metropolis.

Ho₄: There will be no interaction between gender and social networking sites usage for academic purpose on moral development among adolescent students in Kano State, metropolis.

2. Research Methods

The study adopted a factorial design. The population for this study consisted of all adolescent students in senior secondary schools in Kano State Metropolis. The target population for this study consisted of all senior secondary two (SS II) adolescent students in the selected secondary schools in the state. The study sample consisted of two hundred sixty two (262) respondents (adolescent students) selected across the fifteen (10) selected secondary schools in the state. Stratified random sampling technique was used to select fifteen senior secondary schools in Kano State Metropolis while the proportionate sampling technique was used to select the respondents from each school. In line with this, Sambo (2008) posited that the best procedure for selecting a sample from an unequal population is the proportionate sampling technique. In this study, the collection of data was carried out with the use of an adapted questionnaire from Ashiekpe and Mojaye, (2017) on social networking sites and its influence on social and moral development of adolescents. The instrument was scored on a modified five-point Likert-type scale as shown A Strongly Agree= 5, B. Agree=4, C. Undecided=3, D. Disagree=2 and E. Strongly Disagree=1. The instrument contained two sections: A and B. Section A contained demographic data of the respondents and this includes: gender, school type, and parents' socio-economic status while section B contained items on the questionnaire. The instrument was validated by experts in educational test and measurement through face and content validity. Test re-test method of reliability was adopted and Pearson Product Moment Correlation Statistics yielded .71. The instrument was administered to the respondents (adolescent students) by the researchers and with

the assistance of six trained research assistants. SPSS software was employed for the analysis. The data collected were analyzed using Two-Way Anova Analysis at 0.05 level of significance.

Hypotheses Testing and Results

H₀₁: *There will be no interaction between gender and social networking sites usage on social development among adolescent students*

Table 1: Two-Way ANOVA Source Table for Social Networking Sites Usage,

Gender and Social Development

Source	Sum of Squares	Df	Mean Square	F-ratio	p
Between Groups					
Social Networking Sites Usage (Main effect)	944.358	1	944.358	13.998	.000
Gender (Main effect)	424.340	1	424.340	6.290	.013
Social Networking Sites Usage*Gender					
(Interaction Effect)	369.517	1	369.517	5.477	.020
Within Groups (Error)	17472.969	259	67.463		
Total	19965.279	262			

From table 1, there is a significant main effect of social networking sites usage on adolescents' social development $F(1, 259) = 13.998, p = .000$, *Cohen effect size (f)* = .23, *estimated Omega-Squared* (ω^2) = .05, such that the adolescents who were high on social networking sites usage reported less social development (Mean = 55.947; SD = 9.034) compared to adolescents who were low on social networking sites (Mean = 60.061; SD = 8.020). In like manner, gender also showed significant main effect, $F(1, 259) = 6.290, p = .013$, *Cohen effect size (f)* = .16, *estimated*

Ω -Squared(ω^2) = .02, as male adolescents reported more social development (Mean = 59.383; SD = 8.876) compared to female adolescents (Mean = 56.625; SD = 8.009). Lastly, the interaction effect was significant, $F(1, 259) = 5.477, p = .020$, *Cohen effect size (f)* = .14, *estimated Omega-Squared*(ω^2) = .02. The effect of social networking sites usage on social development was more pronounced for male adolescents (Mean Difference = 6.686) compared to female adolescents (Mean Difference = 1.541).

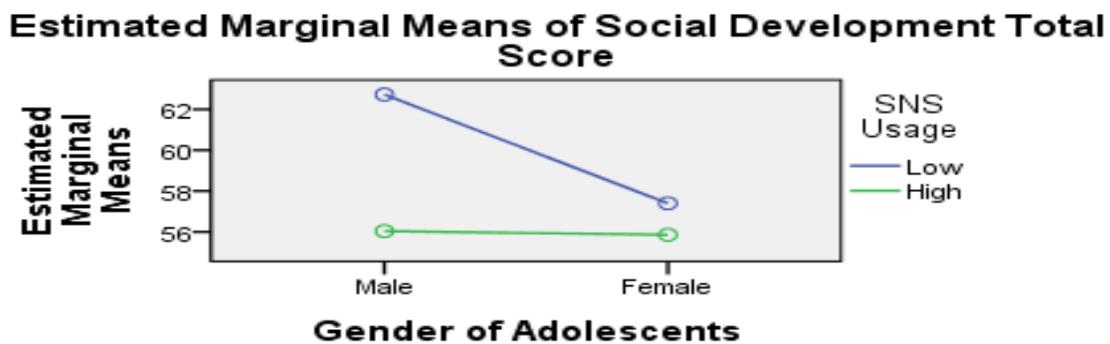


Figure 1: Interaction Plot between Gender and Social Networking Sites Usage on Adolescents Social Development

The alternate hypothesis is accepted and the null hypothesis is set aside. There is both significant main effects and interaction effect of social networking sites usage and gender on social development of adolescents.

H_{02} : *There will be no interaction between gender and social networking sites usage on moral development among adolescent students.*

Table 2: Two-Way ANOVA Source Table for Social Networking Sites Usage, Gender and Moral Development

Source	Sum of Squares	Df	Mean		
			Square	F-ratio	p

Between Groups					
Social Networking Sites Usage (Main effect)	9113.501	1	9113.501	101.150	.000
Gender (Main effect)	307.453	1	307.453	3.412	.066
Social Networking Sites Usage*Gender (Interaction Effect)	67.078	1	67.078	.744	.389
Within Groups (Error)	23335.549	259	90.099		
Total	35076.021	262			

From table 2, there is a significant main effect of social networking sites usage on adolescents' moral development, $F(1, 259) = 101.150, p = .000$, *Cohen effect size* (f) = .59, *estimated Omega-Squared* (ω^2) = .28, such that the adolescents who were high on social networking sites usage reported less moral development (Mean = 37.45; SD = 11.081) compared to adolescents who were low on social networking sites usage (Mean = 50.85; SD = 8.429). There was no significant main effect for gender; and there was no interaction effect. The null hypothesis is accepted.

H_{03} : *There will be no interaction between gender and social networking sites usage for academic purpose on social development among adolescent students*

Table 3: Two-Way ANOVA Source Table for Social Networking Sites Usage for Academic Purpose, Gender and Social Development

Source	Sum of Squares	Df	Mean Square	F-ratio	p
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Between Groups					
Social Networking Sites Usage for Academic Purpose (Main effect)	1640.924	1	1640.924	25.214	.000
Gender (Main effect)	512.388	1	512.388	7.873	.005
Social Networking Sites Usage for Academic Purpose*Gender (Interaction Effect)					
	235.065	1	235.065	3.612	.058
Within Groups (Error)	16855.885	259	65.081		
Total	19965.279	262			

From table 3, there is a significant main effect of social networking sites usage for academic purpose on adolescents' Social Development, $F(1, 259) = 25.214, p = .000$, *Cohen effect size (f)* = .3, *estimated Omega-Squared*(ω^2) = .08, such that the adolescents who were high on social networking sites usage for academic purpose reported more social development (Mean = 61.28; SD = 7.936) compared to adolescents who were low on social networking sites usage for academic purpose (Mean = 55.41; SD = 8.660). The interaction effect between gender and social networking sites for academic purpose on social development was not significant $F(1, 259) = 3.612, p = .058$. Though, the effect was more for male adolescents (Mean Difference = 7.222) compared to female adolescents (Mean Difference = 3.256).

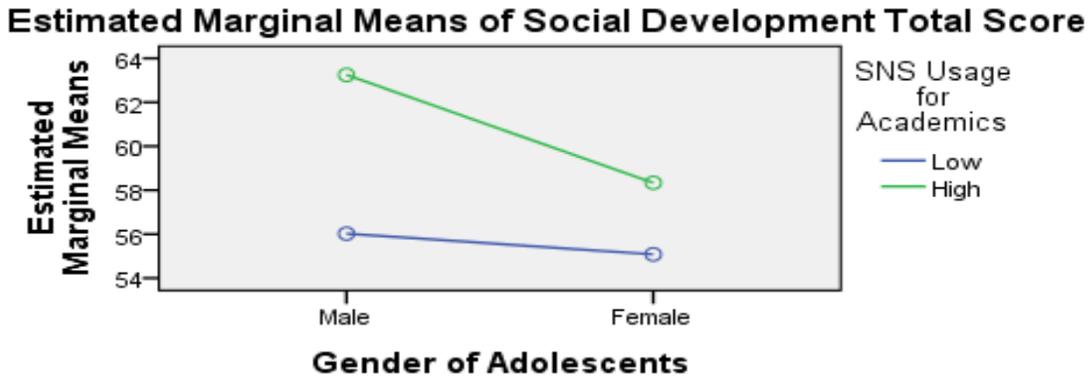


Figure 2: Interaction Plot between Gender and Social Networking Sites Usage for Academic Purpose on Adolescents Social Development

Though there was no significant interaction effect between gender and social networking sites usage for academic purpose on social development which makes the null hypothesis to be retained, there was a main effect for social networking sites usage for academic purpose on adolescents’ social development.

H₀₄: *There will be no interaction between gender and social networking sites usage for academic purpose on moral development among adolescents*

Table 4: Two-Way ANOVA Source Table for Social Networking Sites Usage for Academic Purpose, Gender and Moral Development

Source	Sum of Squares	Df	Mean Square	F-ratio	p
Between Groups					
Social Networking Sites Usage for Academic Purpose (Main effect)	5808.875	1	5808.875	56.453	.000

Gender (Main effect)	891.055	1	891.055	8.660	.004
Social Networking Sites Usage for Academic					
Purpose *Gender (Interaction Effect)	1.412	1	1.412	.014	.907
Within Groups (Error)	26650.503	259	102.898		
Total	35076.021	262			

From table 4, there is a significant main effect of social networking sites usage for academic purpose on adolescents' moral development, $F(1, 259) = 56.453, p = .000$, *Cohen effect size (f)* = .45, *estimated Omega-Squared*(ω^2) = .17, such that the adolescents who were high on social networking sites usage for academic purpose reported more moral development (Mean = 50.16 ; SD = 9.958) compared to adolescents who were low on social networking sites usage for academic purpose (Mean = 39.36; SD = 10.708). There was also a significant main effect for gender, $F(1, 259) = 8.660, p = .004$, *Cohen effect size (f)* = .16, *estimated Omega-Squared*(ω^2) = .03, such that male adolescents reported more moral development (Mean = 48.77, SD = 10.577) compared to female adolescents (Mean = 42.51, SD = 11.698). There was no interaction between gender and social networking sites usage for academic purpose on adolescents' moral development. The null hypothesis is therefore accepted.

3. Discussion of the Findings

The finding of this study revealed that there is a significant main effect of social networking sites usage on adolescents' social development $F(1, 259) = 13.998, p = .000$, *Cohen effect size (f)* = .23, *estimated Omega-Squared*(ω^2) = .05, such that the adolescents who were high on social networking sites usage reported less social development (Mean = 55.947; SD = 9.034) compared to adolescents who were low on social networking sites (Mean = 60.061; SD =

8.020). In the same vein, Gender also showed significant main effect, as male adolescents reported more social development compared to female adolescents. The effect of social networking sites usage on social development was more pronounced for male adolescents (Mean Difference = 6.686) compared to their female adolescents (Mean Difference = 1.541).

Therefore, there are both significant main and interaction effects of social networking sites usage and gender on social development of adolescents. The finding of this study is in line with the finding of Lin and Subrahmanyam (2007) who found that there is a significant effect of social networking sites usage on interpersonal relationship (social development) of students based on gender. They stated that male adolescents are always online more than their female counterparts because of the earlier knowledge of technology forms, for instance, video and computer games whereby their exposure to the social networking sites enhances their social development.

This finding is also in agreement with the finding of Bounds-Raacke and Raacke, (2008) who found that there is a significant effect of social networking sites usage on social development of male college students and that there is likelihood and tendency that males create an account because they are trying to meet a significant other, or because they are already in a relationship with someone who has requested them to join and this in turn enhances their social development. Contrary to this, Giles and Price, (2008) found that female adolescents have been reported to use social networking sites for the purpose of chatting and downloading music than their male counterparts this lead them to be more social than their male counterparts. Rafferty (2008) found that females are more likely than their male counterparts to post sexually explicit pictures of themselves and to talk about sexual activity in the public.

Findings also revealed that there is a significant main effect of social networking sites usage on adolescents' moral development, $F(1, 259) = 101.150, p = .000$, *Cohen effect size (f)* = .59, *estimated Omega-Squared*(ω^2) = .28, such that the adolescents who were high on social networking sites usage reported less moral development (Mean = 37.45; SD = 11.081) compared to adolescents who were low on social networking sites usage (Mean = 50.85; SD = 8.429). There was no significant main effect for gender; and there was no interaction effect.

The finding of this study somewhat extends the finding of Matsika (2012) who found that there is no significant effect of social networking sites usage on students' moral development, he explained that the availability of information and communication technology has invariably presented an external point of control in such a way that local or urban adolescents' morals, attitudes and reactions are being shepherded by foreigners. Social Networking sites which adolescent students' access through numerous e-learning resources, has provided a yardstick or platform for them to buy into or acquire some morally detrimental moral ideas. To this extent, it is being reported from the responses in this study not to be beneficial to moral development. Rukuni (2007) associated that Europe's moral libertinism, which predominates social networking has exerted external pressure and control on the behaviour and attitude of the adolescents.

Findings also showed that there is a significant main effect of social networking sites usage for academic purpose on adolescents' social development, $F(1, 259) = 25.214, p = .000$, *Cohen effect size (f)* = .3, *estimated Omega-Squared*(ω^2) = .08, such that the adolescents who were high on social networking site usage for academic purpose reported more social development (Mean = 61.28; SD = 7.936) compared to adolescents who were low on social networking sites usage for academic purpose (Mean = 55.41; SD = 8.660).

The interaction effect between gender and social networking sites for academic purpose on social development was not significant. Though, the effect was more for male adolescents compared to female adolescents. This finding is in agreement with the finding of Linda(2006) who found that there is a significant main effect of social networking sites usage for academic purpose on student' social development, also stated that there is a positive association between use of social networking sites and academic performance of students.

Students, using internet more, scored higher on reading skills test and had higher grades as well. He explained further that there is effect of social networking sites usage for academic purpose on students' social development. Besides, social networking sites promote interactivity among students and teachers. Based on the available literature at researchers' disposal no literature was found to support the finding on the interaction effect between gender and social networking sites for academic purpose on social development

Findings of the also revealed that there is a significant main effect of social networking sites usage for academic purpose on adolescents' moral development, $F(1, 259) = 56.453$, $p = .000$, *Cohen effect size (f)* = .45, *estimated Omega-Squared*(ω^2) = .17, such that the adolescents who were high on social networking sites usage for academic purpose reported more moral development (Mean = 50.16 ; SD = 9.958) compared to adolescents who were low on social networking sites usage for academic purpose (Mean = 39.36; SD = 10.708).

There was also a significant main effect for gender, such that male adolescents reported more moral development compared to female adolescents. There was no interaction between gender and social networking sites usage for academic purpose on adolescents' moral development. Based on the available literature at researchers' disposal no literature was found to support the finding of this study on the social networking sites usage for academic purpose on

adolescents' moral development and the interaction effect between gender and social networking sites for academic purpose on moral development

4. Conclusions

This study concluded that there were both significant main and interaction effects of social networking sites usage and gender on social development of adolescents, there is a significant main effect of social networking sites usage on adolescents' moral development and there was no significant main effect for gender; and there was no interaction effect, there was a significant main effect of social networking sites usage for academic purpose on adolescents' social development and the interaction effect between gender and social networking sites usage for academic purpose on social development was not significant, finally, there was a significant main effect of social networking sites usage for academic purpose on adolescents' moral development and there was no interaction between gender and social networking sites usage for academic purpose on adolescents' moral development.

5. Recommendations

In the light of the findings of this study the following recommendations were made

1. That adolescent students irrespective of their gender should reduce the extent at which they use social networking sites in order to improve their social and moral development.
2. It is also recommended that adolescent students irrespective of their gender should make use of social networking sites for the improvement in their academic pursuit which will facilitate the improvement in their social and moral development.
3. Enabling environment should be provided by governments, school administrators and other stake holders in education for students, specifically adolescent students in using social networking sites for their academic pursuits, as well as their social and moral development.

References

- Ashiekpe, J. A., & Mojaye, E.M. (2017). Influence of social media use on the social development of Nigeria adolescents and youths. *Journal of Social and Management Sciences* 12, 1, 91-100
- Agosto, D.E., & Abbas, J. (2010). High School Seniors' Social Network and Other Ict Use Preferences And Concerns. Proceedings of the American Society for Information Science and Technology, 47, 1, 1-10.
- Allen, J.P., Evans, M.A., Hare, A.L., & Mikami, A.Y.(2010). Adolescent Peer Relationships and Behaviour Problem Predict Young Adults' Communication on Social Networking Websites. *Developmental Psychology*, 46, 1, 46-56.
- Bonds-Reacke, J. & Reacke, J. (2008). My space and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *Cyber psychology and behaviour*, 11, 169-174
- Boyd, D., & Ellison, N. (2008). Social network sites: Definition History and Scholarship. *Journal of computer mediated communication*, 13, 210-230
- Bufferdi, L. E., & Campbell, W. K. (2008). Naraism and social networking web sites. *Personality and social psychology bulletin*, 34, 10, 1303-1314
- Donath, J., & Boyd, D. (2009). Public displace of connection. *B T technology Journal*.22, 4, 71-82.
- Godfrey, M., & Nisbert, T. T. (2014). Social Media and the Moral Development of adolescent are pupils' soul mates antagonists? *Zimbabwe journal of education* 26, 1, 100-120
- Haythornthwaite, C. (2005). Social networks and internet connectivity effects *Communication and Society*, 8, 2, 125-147.
- Helen, N.E., Charles, O. O., & Janifer. N. O. (2014). The use of social networking sites among the undergraduate students of university of Nigeria Nsukka. *Library philosophy and practice (e-journal) libraries at university of Nabraska-Lincoln*.
- Lin, G., & Subrahmanyam, K. (2007). Adolescents and the net: Internet use and well-being. *Adolescence*, 42,168, 659-675 Retrieved from: <http://findarticles.com/p/articles/mi/m 22481 is 168-42/ain27483301> (May 3, 2018)
- Neelamalar, M., & Chitra, P. (2009). New Media and Society: A study on the impact of social networking sites on Indian Youth. *.Estudoem Comunicacap*. 6, 125-145
- Marten, M. J., & Williams, A. (2009). Adolescent online social networking following the death of a peer *Journal of Adolescent Research*, 24, 67-90
- Mesika, C. (2012). Traditional African education: :its significance to current educational practices with special reference to Zimbabwe, Gweru: Mambo Press
- Mistry, V. (2011). Critical care training: Using twitter as a teaching too: Virendramistry. *Uritish Journal of nursing* 20, 20, 2011.

- Mwangi, A. W. (2013). Impact of social networking sites on international relationship among teenagers: A case study of Murang's A East District. A Master's project submitted to the school of journalism and mass communication university of Nairobi.
- Olasinde, E.A. (2014). An analysis of the influence of social media sites on Nigerian undergraduates. *International policy brief series-education and science journal* 4, 1,53-65
- Onomo, A.A. (2012). .People power.15 social media. The guardian, pp 38
- Peter, D., & Valdenburg, P. (2009). Social Consequences of the Internet for adolescents. *Cyber psychology and behaviour* 9. 584-590.
- Sambo, A. A. (2008). *Research Methods in Education*. Edo: Stirling- Horden Publishers, Edo State Nigeria.
- Sunden, J. (2003). *Material Virtualities*. New York: Peter Lang.
- Rukimi, .M. (2007). *Being African: Rediscovering the traditional unhubuntu--- botho pathways of being human*. Arcadia: Mandala publishers.
- Valkenburg, P.M & Peter, J. (2009). The effect of instant messaging on the quality of adolescents existing friendships: A longitudinal study. *Journal of Communication* 59, 79-97