



Home and school environment as determinants of internet addiction among adolescents with hearing impairment in Ibadan, Oyo State, Nigeria

¹Omowunmi Mercy Oyadoyin 

¹Department of Special Education, Faculty of Education, University of Ibadan, Nigeria

¹Primary author: mercyomowunmi2@gmail.com

Abstract— Adolescent students have been addicted to the internet, and students with hearing impairment are not left out. Excessive use and uncontrollable internet are among the ills, despite being a communication tool for students with hearing impairment. The study, therefore, evaluated the home and school environment as determinants of internet addiction among adolescents with hearing impairment in Ibadan. The correlational type of survey research design was adopted for the study, and eighty-one (81) adolescents with hearing impairment in Ibadan were the participants from three secondary schools. Research instruments adopted were the Internet Addiction, home environment, and peer pressure inventory scales. These were used to answer three research questions raised for the study. The data collected from the study were analysed using frequency count, percentages, Pearson product-moment correlation (PPMC), and regression analysis. The study revealed a significant relationship between the home and school environment on internet addiction among adolescents with hearing impairment, the school environment, and the home environment. It also revealed that there was a joint contribution of home and school environment to internet addiction among adolescents with hearing impairment, $R 0.715$. The study further revealed the relative contribution of home and school environment to internet addiction, where the school environment exerts more influence on internet addiction than the home environment. It indicated that parental attitudes and peer influence had a positive influence on internet addiction among adolescents with hearing impairment. Based on the findings, it was recommended that parents with children with hearing impairment should improve their communication and interaction with their children by learning effective communication modes with their wards, and the school authority should ensure that the school environment is friendly enough for adolescents with hearing impairment to thrive in without any form of intimidation.

Keywords: Adolescent, Internet addiction, Hearing impairment, Parental attitude, Peer influence

To cite this article (APA): Oyadoyin, O. (2025). Home and school environment as determinants of internet addiction among adolescents with hearing impairment in Ibadan, Oyo State, Nigeria. *International Journal of Studies in Inclusive Education*, 2(2), 31-41. <https://doi.org/10.38140/ijisie.v2i2.1957>

I. INTRODUCTION

THE 21st century is a great time when technology is rapidly changing. Everyone has various technological devices, such as a computer, tablet, cell phone, or TV. The internet is seen as a global network that connects millions of people worldwide and enables users to exchange information, which anyone can access at any time. Adolescents are especially fascinated by these new technological mediums of communication, which offer interaction with others and simultaneously provide faceless individuals the impression of belonging to a community and a sense of social acceptance.

Millions of people use the internet globally, and its many advantages have only increased its user base. However, the internet has a dark side, and one of the negative effects of its enormous potential has been excessive and uncontrolled use, which is commonly known as Internet addiction. Adolescents with hearing impairment rely heavily on the internet and mobile devices for their social and academic lives, and these devices are increasingly becoming a part of who they are. Since broadband and mobile internet access have made it possible for adolescents with hearing impairment to access the internet whenever they want, providing them with round-the-clock entertainment, interaction, and communication, there is a genuine concern that adolescents with hearing impairment can become so immersed in their online world that it takes over their daily lives. It is easy to see that adolescents with hearing impairment spend many hours pursuing their interests. Adolescents with hearing impairment spend much time online

engaging with friends and strangers, playing games, pursuing interests, and gathering information. However, internet use can become troublesome and even be considered an addiction, particularly in adolescents with hearing impairment, when it becomes obsessive and interferes with other aspects of their lives.

Adolescence is a time when changes occur both physically and psychologically, which generally occur during the period of puberty to legal adulthood, the age of maturity. Hearing impairment is the inability or reduction in the ability to hear clearly due to a problem in the hearing mechanism. Hearing impairment can occur in the outer, middle, and inner ear along the pathway to the brain. Individuals with hearing impairment are often neglected due to their communication limitation, and they suffer relatively more when compared with their hearing peers because they cannot fully integrate themselves into the world of hearing. Indeed, communication difficulty tends to have a significant influence on the well-being and quality of life of adolescents with hearing loss.

Adolescents with hearing impairment often feel that their relationships with parents are cold and not supportive; they feel neglected by their siblings, who see them as second-class citizens in the family, so they tend to find solace in the virtual world. Internet makes it feasible for some adolescents with hearing impairment to affiliate with other like-minded individuals online when such opportunities may not be possible in face-to-face interaction. Adolescents with hearing impairment use internet for communication, education, entertainment, and other purposes in varying degrees.

An individual with a hearing impairment may be more likely to be

addicted to his/her cell phone to escape from this reality. They might also have identity problems finding themselves in the perfect hearing world and have been different. The internet serves as a more useful channel for adolescents with hearing impairment than for other users because of the type of anonymous communication and the possibility of hiding their disabilities. It has also been observed that children with hearing impairment spend most of their time on social media platforms and the internet to bridge the communication gap between them and the hearing.

New Internet-based technologies for information and communication, including social media, computers, mobile phones, and other gadgets, have advanced significantly during the past ten years. Most users of these various tools are young adults and adolescents with hearing impairment, and their primary function is interpersonal communication and social interaction. As is well known, members of this age frequently use the internet and spend significant time on social media platforms like Facebook, Twitter, Google Plus, and WhatsApp. This is probably because students and adolescents with hearing impairment use it extensively to gain global access. Internet addiction has been defined as a loss of control over Internet-use behaviour, which leads to significant impairment in other areas of life (Sim et al., 2012).

It is becoming more widely acknowledged that excessive internet and electronic media use is a form of internet addiction, an illness whose symptoms are like those of substance abuse and gambling disorder. Certain adolescents with hearing impairment, such as those who are exhibiting other psychological symptoms and disorders like depression, attention deficit hyperactivity disorder symptoms, or hostility, may be more susceptible to exhibiting signs of internet addiction than others (Ha et al., 2007; Yen et al., 2009).

People staring at their smartphones are now a usual sight in public means of transportation, restaurants, or malls, where people used to talk to one another without electronic mediation. Technologically induced means of communication have taken hold of many societies, and the increase of new communication platforms, mostly called 'Social Media', has become an ever-increasing part of individuals' daily lives and routines (Andreassen et al., 2012). After from the high usefulness and enjoyable features of these platforms, and the various possibilities they offer in terms of communicating, documenting, information processing or gaming, the increase and excessive use can result to immense health problems for its users, one of them is addiction Ayyagari et al. (2011), Maier et al (2015). Given the great number of users of Social Networking Sites alone, and the fact that they have already become an inherent part of many users' lives, it is evident that the dimensions of health problems related to these technologies affect the society either in one or the other way, and this gives reason for concern.

Social media technologies facilitate social interaction, teamwork, and stakeholder deliberation. These days, these technologies include virtual worlds, blogs, wikis, networking sites like Facebook, and tools for sharing media (text, music, photos, and videos). Bryer and Zavattaro (2001). It is alarming to learn that 24% of youth, particularly adolescents, spend all their time online. 92% of adolescents go online daily due to the accessibility of modern smartphones, and 56% visit their social media accounts frequently. Although these online platforms might evolve or be replaced by others, it appears crucial to approach social media by examining the platforms people utilise. Social Network Sites are defined as: Web based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, (3) view and traverse their list of connections and those made by others within the system the nature and nomenclature of these connections may vary from site to site (Boyd & Ellison, 2008).

Children with hearing impairment often show language delays and have difficulty acquiring spoken language abilities (Quittner et al., 2010). Hearing parents of these children with hearing impairment may display higher stress and negative attitudes toward their child's hearing impairment. The resulting stress and negative attitudes can cause a

communication barrier between the parent and child, negatively affecting a child's development (Quittner et al., 2010). These negative attitudes may correlate with hearing parent's misconceptions of the capabilities for communication and day-to-day living of individuals, especially their children with hearing impairment (Cooper et al., 2004).

Adolescents hearing impairment with negative attitudes from their parents might feel like an outcast in the family and not know who they are. Adolescents with hearing impairment are in a vulnerable phase of their life, when he/she experiences physical, emotional, psychological, and environmental change, which makes them more interested in the internet owing to its unique features (like speed, connectivity, anonymity, etc.). Internet use is growing widely among adolescents with hearing impairment. It is a modern world communication tool; it makes communication easier with friends, strangers, regardless of age, gender, disability, race, or geographical location. These characteristics of the internet have made its popularity grow in today's individuals with hearing impairment, owing to the applications internet provides to establish communication, like instant messenger, WhatsApp, chat room, etc. (Boneva, et al., 2006; Craig, 2003; Gross, 2004). The virtual world gives access to information on different domains of knowledge. This inexhaustible source of knowledge, information, and easy communication further adds to adolescents with hearing impairment who need internet access.

Besides parents, peers also have a significant role during the adolescent period. Peer relationships impact the adolescent's hearing impairment and social and behavioural functioning. As peers become a source of support, their offline interactions might be replicated online. Online communication is an additional way of improving bonding with their friends at school and other social gatherings (Wellman et al., 2001). However, due to a lack of maturity, they might not know when to stop, which might result in internet addiction over time.

Therefore, regarding the internet, which is quite attractive and entertaining, adolescents with hearing impairment could imitate their peers. According to the Social Learning Theory, the attitudes of their parents and peers are observed by adolescents with hearing impairment. They could imitate the problematic Internet use behaviours of their peers. Friendship is important for adolescent psychological well-being Armsden and Greenberg (1987) and friends are powerful social influences upon adolescents' activities such as viewing anti-social television programmes Nathanson, (2001), playing video games Dalesandro and Chory-Assad (2006), and using the internet for communication (Peter et al., 2005).

When the family is not supportive, for instance, if the parents work extra hours and are largely unavailable, their children may turn to their peers for emotional support, or for a child with a hearing impairment who is not well accepted, they may be seen as the second citizen of the family. This also occurs when the conflict between parents and children during adolescence or at any stage during a child's development becomes so great that the child feels neglected and seeks company elsewhere. Most children and adolescents in this circumstance do not discriminate between the kind of group they join. The need for affection or closeness is often greater than the need to do the right thing. For some adolescents who feel isolated and abandoned by their family members, being part of a peer group provides them with acceptance and security not available at home. This peer group can therefore lead adolescents with hearing impairment on the internet to keep in touch with his/her friends, and the use of this internet might lead to internet addiction.

Communication is one major problem for adolescents with hearing impairment. This communication problem has led to neglect at home by the parents and siblings. This neglect has led to isolation as there is no one to communicate with; therefore, they cling to the internet to escape from the reality at home. In the school socialisation environment, they seek to connect with their peers. For an inclusive school where most students do not understand sign language, children with hearing impairment use the internet to bridge the communication gap and keep in touch with their friends.

Generally, adolescents with hearing impairment have been observed to be addicted to the internet. The development of these social media platforms, such as Facebook, Instagram, WhatsApp, Twitter, etc., are making adolescents with hearing impairment more addicted to the internet. Consistent use of these platforms has resulted from some home and school environment factors, such as peer influence and parental attitudes. Inability to communicate appropriately with other people leads individuals with hearing impairment towards loneliness and isolation from society. This feeling of loneliness is one of the most common problems during adolescence, leading adolescent to the internet to cover up for their loneliness. As a result of this, covering up has brought about 'addiction' in them to the internet.

Many studies might have talked about internet addiction. Still, there are limited studies on the home and school environment of adolescents with hearing impairment and internet addiction; therefore, this study is investigating the home and school environment as determinants of internet addiction among adolescents with hearing impairment in Ibadan, Nigeria.

II. OBJECTIVE OF THE STUDY

This study examines the home and school environment as determinants of internet addiction among adolescents with hearing impairment. Specifically, the study is designed to find out the relationship between home environment (parental attitude) and internet addiction among adolescents with hearing impairment. Investigate the relationship between school environment (peer influence) and internet addiction among adolescents with hearing impairment and examine the usage of the internet among adolescents with hearing impairment.

III. METHODS

Research approach and research design

This research work was a correlational survey research design, which relies mainly on primary data, and was crucial for achieving the research objectives. The survey method facilitated the systematic and organised collection of primary data directly from participants, enabling the researcher to gather quantitative data from a representative sample. This approach was instrumental in describing the target population's characteristics, behaviours, or attitudes and generalising findings to the larger group. The design is appropriate for this study because the researcher collected data from the sample to describe the entire population.

The correlational survey research was essential to this study because it provided a strong methodological framework for investigating the dynamic relationships between the three variables: peer influence and parental attitude (independent variables), and internet addiction (dependent variable). It helped the researcher identify meaningful relationships and contributed to a deeper understanding of the peer pressure and parental attitudes that may influence online behaviours of adolescents with hearing impairments.

Respondents

The respondents of this study consisted of secondary school students with hearing impairment in Ibadan, Oyo State, from JSS 3 to SS 3 within the 13-23 age range. Eighty-one (81) students were purposively selected from Methodist Grammar School (Special), Bodija, Ijokodo High School, Poly Road, Ibadan, and Christian Mission for the Deaf, Onireke, GRA, Ibadan. These three schools were selected among the special schools in Ibadan.

Data collection tools

The three instruments used for the study were the Internet Addiction Test (IAT), Peer Pressure Inventory Scale, and Home Environment Scale. The researcher ensured the scales were reliable and valid. The IAT (Internet Addiction Test) was developed by Kimberly (Young, 1998), a valid instrument for the assessment of internet addiction, it has a reliability score of .85, Peer Pressure Inventory Scale was developed by

Isaiah (2011), a valid instrument for the assessment of peer pressure, it has a reliability score of .80, Home Environment Scale was developed by Isaiah (2011), a valid instrument for the assessment of parental attitudes, it has a reliability score of .75. These questionnaires were adapted to suit the need of the study. The questionnaire was structured in a closed-ended format with four sections. Section A is respondent's Demographic Characteristics, Section B is the home environment (parental attitudes), Section C is peer influence, and Section D is the internet addiction scale. Section B consists of 20 questions, Section C 21, and Section D 20.

Procedure of administration

The questionnaires were administered personally by the researcher, and the purpose of the study was explained to the respondents. The respondents were given ample time to complete the items in the questionnaire as their identities were withheld. The researcher also explained any aspect of the questionnaire that was unclear to the respondents.

Data analysis

The data collected were analysed using Pearson's product-moment correlation and multiple regression to determine the relationship between the independent and dependent variables. The Pearson Product-Moment Correlation Coefficient (r) was employed to determine the degree and direction of the linear relationship between the independent variables (peer influence and parental attitude) and the dependent variable (internet addiction). A Multiple Regression Analysis was conducted following the correlation analysis to assess the independent variables' combined and individual predictive strength (peer influence and parental attitude) on the dependent variable (internet addiction). This method allowed the researcher to assess the relative contribution of each independent variable and identify which variable(s) significantly predicted the behaviour of adolescents with hearing impairments to internet addiction. All statistical analyses were conducted at a 0.05 significance level, and the results were interpreted based on standard statistical criteria for correlation and regression analysis.

IV. RESULTS

Relationship between home (parental attitude) and school (peer influence) environment on internet addiction.

Table 1: Relationship between home (parental attitude) and school (peer influence) environment on internet addiction

Variable	Internet addiction	School environment	Home environment
Internet addiction	1		
School environment	.618**	1	
(P value)	.005		
Home environment	.845**	.570**	1
(p-value)	.000	.000	
Mean	50.73	56.30	69.88
Standard Deviation	9.63	6.34	7.10

Table 1 showed a significant relationship between the independent variables, home and school environment (peer influence and parental attitude), and the dependent variable (internet addiction). That is, school (peer influence) ($r = .618$, $N = 81$, $p < .05$) and home (parental attitude) ($r = .845$, $N = 81$, $p < .05$) has significant with internet addiction. It implies that there was a significant relationship between school (peer influence) and home (parental attitude) environment on internet addiction.

Regression on joint prediction of home (parental attitude) and school (peer influence) environment in internet addiction

Table 2: Regression on joint prediction of home (parental attitude) and school (peer influence) environment on internet addiction

R=.715						
R ² =.916						
Adj. R ² =.777						
Std. Error=9.41632						
Model	Sum of Squares	Df	Mean Square	F	Sig. (p value)	Remark

Regression	357.553	2	478.776	22.016	.000	Sig.
Residual	6916.028	78				
Total	7273.580	80	88.667			

As indicated in Table 2, it was found that the linear combination of the joint prediction of home (parental attitude) and school environment (peer influence) on internet addiction ($F_{(2,80)} = 22.016, p < 0.05$). The result yielded a coefficient of multiple regression of $R = 0.715$ and multiple R -squared of 0.916. The result also revealed that Adjusted $R^2 = 0.777$, indicating that the independent variables accounted for about 77.7% of the variance. This implied that there was a joint contribution of home (parental attitude) and school (peer influence) environments on internet addiction.

Regression on the contribution of school (peer influence) and home (parental attitude) on internet addiction

Table 3: Regression on the contribution of school (peer influence) and home (parental attitude) on internet addiction

Variable	Unstandardised coefficients		Standardised coefficient	t	Sig. (p-value)	Remark
	B	Std. Error				
(Constant)	71.463	10.356	-	6.901	.000	
School environment	.223	.182	.963	1.114	.003	Sig.
Home environment	.135		.612	7.738	.046	Sig.

Table 3 shows personal factors, the unstandardised regression weight (β), the standardised error of estimate (SEB), the standardised coefficient, the t-ratio, and the level at which the t-ratio is significant. As indicated in the table, school (peer influence) ($\beta = 0.963, t = 11.114, p < 0.05$) was tested significantly and was a predictor of internet addiction, and home (parental attitude) ($\beta = .612, t = 7.738, p < 0.05$) was a predictor. This implied that there was a relative contribution of home and school environment to internet addiction, where the school environment (peer influence) exerts more influence on internet addiction.

V. DISCUSSION

The result of the study showed a positive correlation between home (parental attitude) and school (peer influence) environment as determinants of internet use among adolescents with hearing impairment. The result supports the view of Seidman (2013) that the general pressure among the peers and the quest for recognition is an instrumental way for social compensation, which may lead to excessive use of the internet and Facebook. A review of computer-mediated communication literature conducted by Shepherd and Edelmann (2001) revealed that the online communication via Facebook may fulfil individual's belonging and acceptance-seeking needs.

The result also corroborates that of Yen et al. (2009) and Siomos et al. (2012), family dysfunction, higher parent-adolescent and inter-parental conflicts predict internet addiction. Research in the psychological field associated with internet addictive behaviour revealed that the online environment offers an opportunity to create a new identity free from social constraints, such as destructive family relationships. Adolescents with hearing impairment, who do not feel secure about their real-life connections to their family and thus have undesirable family identity tend to use Facebook more to make up for this, alternatively to the real life Lei (2007), Ni (2009), Beard (2005), other studies also found out that the time children spend with screen media is associated with minimal attachment to their parents (Richard et al, 2010).

Communication among family members helps mediate adolescents with hearing impairments' internet experience. The level of closeness between parents and children and parents' attitudes toward the internet were good predictors of adolescents with hearing impairment exposure and response to negative content online (Cho & Cheon, 2005; Wartella et al., 2002). Internet usage is also a function of family connections. It has been revealed that internet use is negatively related to adolescents' perception of the quality of family relationships (Mesch, 2003). To make

up for their lack of in-person contact with their peers, adolescents with hearing impairment, especially those who struggle with peer relationships and have a negative sense of self, are more likely to be active on Facebook and other social networking sites. According to this theory, people can use the internet to avoid real-life social interactions, which satisfies their desire for approval and raises their sense of self-worth (Xu et al., 2012). Eventually, this, in turn, may potentially develop into excessive internet use. Davis (2001) indicated that a lack of parental support was likely linked to problematic Internet use by adolescents with hearing impairment. Adolescents with hearing impairment who believe that their parents are more affectionate, caring, and non-rejecting are less likely to display negative or problematic psychosocial behaviours (Yu & Gamble, 2010).

Huang et al. (2010) found that the absence of love from the family was significantly associated with Internet addiction. Moreover, Xiuqin et al. (2010) reported that internet addictive adolescents reported lower emotional warmth, higher rejection, and higher punishment from mothers and perceived their parents as emotionally distant, intrusive, rejecting, and punitive. In contrast, participative and supportive parental monitoring can greatly decrease the number of adolescents with hearing impairment becoming addicted to the Internet (Lin et al., 2009).

The result of the study indicated peer influence as the most significant predictor of internet addiction among adolescents with hearing impairment. The finding also lends credence to that of Lenhart et al. (2001), who claim that peer communication plays a significant role in predicting internet addiction in adolescents with hearing impairment. This could be because they use the internet to communicate with their friends. Also, the internet offers a wide range of multimedia games with designs that make the virtual world so real that these adolescents with hearing impairment start preferring online games to outdoor activities. Research findings reveal that the internet is used to communicate with friends, enhancing their relationships with peers. Also, parental support decreases in adolescence, while peer support increases, making peers more effective (Helsen et al., 2000). This effect most of the time becomes an influence and pressure on adolescents.

In addition, Virtanen and Malinen (2008) found using a survey of 240 Finnish Facebook users that most of the sample is interested in using Facebook to maintain existing relationships with the peer group (Debatin et al, 2009; Pempek et al, 2009). Consequently, individuals with higher levels of normative social influence are more likely to use Facebook for communication purposes (Quan-Haase & Young, 2010). It has been argued that adolescents with hearing impairment may feel obliged to maintain their social networks on the internet, which may cause excessive Internet use, using social networking sites as a tool (Kuss & Griffiths, 2011).

VI. CONCLUSION

The findings of the study clearly showed there was a positive correlation between home and school environment (peer influence and parental attitude) on internet addiction among Adolescents with hearing impairment. This study established that adolescents use the internet to find solace from the challenges they encounter in the real world due to a language barrier. The findings of this study have implications for parents of adolescents with hearing impairment, school administrators, special educators, and other researchers who may discover gaps to carry out further studies.

VII. CONFLICTS OF INTEREST

There are no conflicts of interest in this study.

REFERENCES

- Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook addiction scale. *Psychological Reports, 110*(2), 501-517. <https://doi.org/10.2466/02.09.18.PRO.110.2.501-517>

- Armsden, G. C., & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-454. https://doi.org/10.1007/BF_02202939
- Ayyagari, R., Grover, V., & Purvis, R. (2011). Technostress: Technological antecedents and implication. *MIS Quarterly*, 35(4), 831-858. <https://doi.org/10.2307/41409963>
- Beard, K. W. (2005). Internet addiction: A review of current assessment techniques and potential assessment questions. *Cyber Psychology & Behaviour*, 8(1), 7-10. <https://doi.org/10.1089/cpb.2005.8.7>
- Boneva, B. S., Quinn, A., Kraut, R. E., Kiesler, S. B., & Shklovski, I. (2006). Teenage communication in the instant messaging era. In R. E. Kraut, M. Brynin, & S. Kiesler (eds.), *Computers, phones and the internet: Domesticating information technology* (pp. 201-218). Oxford: Oxford University Press.
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230. <https://doi.org/10.1111/j1083-6101.2007.00393.x>
- Bryer, T. A., & zavattaro, S. M. (2001). Social media and public administration: Theoretical dimensions and introduction to the symposium. *Administrative Theory & Praxis*, 33(3), 325-340. <https://doi.org/10.2753/ATP1084-1806330301>
- Cho, C. H., & Cheon, H. J. (2005). Children's exposure to negative Internet content: Effects of family context. *Journal of Broadcasting & Electronic Media*, 49(4), 488-509. https://doi.org/10.1207/s15506878jobem4904_6
- Cooper, A., Rose, J., & Mason, O. (2004). Measuring the attitudes of human service professionals toward deafness. *American Annals of the Deaf*, 148(5), 385-389. <https://doi.org/10.1353/aad.2004.0001>
- Craig, O. (2003, February 9). *Chat mates watched Internet suicide. The Telegraph*. Retrieved from <https://www.telegraph.co.uk/news/main.jhtml?xml=/news/2003/02/09/wsui09.xml>
- Dallessandro, A. M., & Chory-Assad, R. M. (2006, June). Comparative significance of parental versus peer mediation of adolescents' antisocial video game play. Paper presented at the Annual Meeting of the International Communication Association, Dresden, Germany.
- Davis, R. A. (2001). A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior*, 17(2), 187-195. [https://doi.org/10.1016/S0747-5632\(00\)00041-8](https://doi.org/10.1016/S0747-5632(00)00041-8)
- Debatin, B., Lovejoy, J. P., Horn, A. K., & Hughes, B. N. (2009). Facebook and online privacy: Attitudes, behaviors, and unintended consequences. *Journal of Computer-Mediated Communication*, 15(1), 83-108. <https://doi.org/10.1111/j.1083-6101.2009.01494.x>
- Griffiths, M. D. (1996). Internet "addiction": An issue for clinical psychology? In *Clinical Psychology Forum* (Vol. 97, pp. 32-36). Nottingham, England: Nottingham Trent University. <https://doi.org/10.53841/bpscpf.1996.1.97.32>
- Gross, E. F. (2004). Adolescent internet use: What we expect, what teens report. *Journal of Applied Developmental Psychology*, 25(6), 633-649. <https://doi.org/10.1016/j.appdev.2004.09.005>
- Ha, J. H., Kim, S. Y., Bae, S. C., Bae, S., Kim, H., Sim, M., ... & Cho, S. C. (2007). Depression and Internet addiction in adolescents. *Psychopathology*, 40(6), 424-430. <https://doi.org/10.1159/000107426>
- Helsen, M., Vollebergh, W., & Meeus, W. (2000). Social support from parents and peers and emotional problems in adolescence. *Journal of Youth and Adolescence*, 29(3), 319-335. <https://doi.org/10.1023/A:1005149101954>
- Huang, X., Zhang, H., Li, M., Wang, J., Zhang, Y., & Tao, R. (2010). Mental health, personality, and parental rearing styles of adolescents with Internet addiction disorder. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 401-406. <https://doi.org/10.1089/cyber.2009.0213>
- Isaiah O. (2011). *Home Environment Scale*. University of Ibadan Bookshop, Ibadan.
- Isaiah O. (2011). *Peer Inventory Scale*. University of Ibadan Bookshop, Ibadan.
- Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction: A literature review of empirical research. *International Journal of Environmental Research and Public Health*, 8(9), 3528-3552. <https://doi.org/10.3390/ijerph8093528>
- Lenhart, A., Rainie, L., & Lewis, O. (2001). *Teenage life online* [Report]. Washington, DC: Pew Internet & American Life Project.
- Lin, C. H., Lin, S. L., & Wu, C. P. (2009). The effects of parental monitoring and leisure boredom on adolescents' Internet addiction. *Adolescence*, 44(176), 993-1004.
- Maier, C., Laumer, S., Eckhardt, A., & Weitzel, T. (2015). Giving too much social support: Social overload on social networking sites. *European Journal of Information Systems*, 24(5), 447-464. <https://doi.org/10.1057/ejis.2014.3>
- Mesch, G. S. (2003). The family and the Internet: The Israeli case. *Social Science Quarterly*, 84(4), 1038-1050. <https://doi.org/10.1046/j.0038-4941.2003.08404016.x>
- Nathanson, A. I. (2001). Parent-child perspectives on the presence and meaning of parental television mediation. *Journal of Broadcasting & Electronic Media*, 45(2), 210-220. https://doi.org/10.1207/s15506878jobem4502_1
- Ni, X., Yan, H., Chen, S., & Liu, Z. (2009). Factors influencing Internet addiction in a sample of freshman university students in China. *CyberPsychology & Behavior*, 12(3), 327-330. <https://doi.org/10.1089/cpb.2008.0321>
- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30(3), 227-238. <https://doi.org/10.1016/j.appdev.2008.11.010>
- Peter, J., Valkenburg, P. M., & Schouten, A. P. (2005). Developing a model of adolescent friendship formation on the Internet. *CyberPsychology & Behavior*, 8(5), 423-430. <https://doi.org/10.1089/cpb.2005.8.423>
- Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society*, 30(5), 350-361. <https://doi.org/10.1177/0270467610380009>
- Quittner, A. L., Barker, D. H., Cruz, I., Snell, C., Grimley, M. E., Botteri, M., & CDaCI Investigative Team. (2010). Parenting stress among parents of deaf and hearing children: Associations with language delays and behavior problems. *Parenting: Science and Practice*, 10(2), 136-155. <https://doi.org/10.1080/15295190903212851>
- Richards, R., McGee, R., Williams, S. M., Welch, D., & Hancox, R. J. (2010). Adolescent screen time and attachment to parents and peers. *Archives of pediatrics & adolescent medicine*, 164(3), 258-262. <https://doi.org/10.1001/archpediatrics.2009.280>
- Seidman, G. (2013). Self-presentation and belonging on Facebook: How personality influences social media use and motivations. *Personality and Individual Differences*, 54(3), 402-407. <https://doi.org/10.1016/j.paid.2012.10.009>
- Shepherd, R. M., & Edelmann, R. J. (2001). Caught in the web. *The Psychologist*, 14(10), 520-521.
- Sim, T., Gentile, D. A., Bricolo, F., Serpelloni, G., & Gulotta, G. (2012). A conceptual review of research on the pathological use of computers, video games, and the Internet. *International Journal of Mental Health and Addiction*, 10(5), 748-769. <https://doi.org/10.1007/s11469-011-9369-7>
- Siomos, K., Floros, G., Fisoun, V., Dafouli, E., Farkonas, N., Sergeantani, E., ... & Geroukalis, D. (2012). Evolution of Internet addiction in Greek adolescent students over a two-year period: The impact of parental bonding. *European Child & Adolescent Psychiatry*, 21, 211-219. <https://doi.org/10.1007/s00787-012-0264-3>
- Virtanen, T., & Malinen, S. (2008). Supporting the sense of locality with online communities. *MindTrek '08: Proceedings of the 12th international conference on Entertainment and media in the ubiquitous era* (pp. 145-1489). Tampere, Finland: Association for Computing Machinery. <https://doi.org/10.1145/14257199.1457231>
- Wartella, E. A., Lee, J. H., & Caplovitz, A. G. (2002). *Children and interactive media: Research compendium update*. Markle Foundation.
- Wellman, B., Haase, A. Q., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease or supplement social capital? Social networks, participation, and community commitment. *American*

- Behavioral Scientist*, 45(3), 436-455.
<https://doi.org/10.1177/00027640121957286>
- Xiuqin, H., Huimin, Z., Mengchen, L., Jinan, W., Ying, Z., & Ran, T. (2010). Mental health, personality, and parental rearing styles of adolescents with Internet addiction disorder. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 401-406.
<https://doi.org/10.1089/cyber.2009.0222>
- Xu, Z., Turel, O., & Yuan, Y. (2012). Online game addiction among adolescents: Motivation and prevention factors. *European Journal of Information Systems*, 21(3), 321-340.
<https://doi.org/10.1057/ejis.2011.57>
- Yen, C. F., Ko, C. H., Yen, J.-Y., Chang, Y. P., & Cheng, C. P. (2009). Multi-dimensional discriminative factors for Internet addiction among adolescents regarding gender and age. *Psychiatry and Clinical Neurosciences*, 63(3), 357-364. <https://doi.org/10.1111/j.1440-1819.2009.01969.x>
- Yen, J.-Y., Ko, C.-H., Yen, C.-F., Wu, H.-Y., & Yang, M.-J. (2009). The comorbid psychiatric symptoms of Internet addiction: Attention deficit and hyperactivity disorder (ADHD), depression, social phobia, and hostility. *Journal of Adolescent Health*, 45(1), 93-98.
<https://doi.org/10.1016/j.jadohealth.2008.12.002>
- Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology & behavior*, 1(3), 237-244.
<https://doi.org/10.1089/cpb.1998.1.237>
- Yu, J. J., & Gamble, W. C. (2010). Direct and moderating effects of social affordances on school involvement and delinquency among young adolescents. *Journal of Research on Adolescence*, 20(4), 811-824.
<https://doi.org/10.1111/j.1532-7795.2010.00668.x>

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of GAERPSY and/or the editor(s). GAERPSY and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.