

Impact of Cyber Relational Addiction on Undergraduates' Interpersonal Relationship in Nigeria

(Dampak dari Ketergantungan Relasi Siber terhadap Hubungan Interpersonal Mahasiswa Sarjana di Nigeria)

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Abstract: The upsurge in the use of cyberspace in recent years has led to pathological use for some individuals especially in the area of cyber relational addiction. This study aimed to investigate the influence of cyber relational addiction on interpersonal relationships and how variables of age, religion, levels of study, and gender of respondents moderate the influence of cyber relational addiction on their interpersonal relationships. This study employed a descriptive survey research design and administered a self-designed questionnaire on 420 randomly selected undergraduates from seven faculties at the University of Ilorin. A research question was answered in this study, while the hypotheses were also tested at 0.05 levels of significance. The varying collected data were analyzed using t-test and Analysis of Variance (ANOVA) statistical methods. Undergraduate students' sources of information were mostly from the Internet than interacting with people, and they believed gaining more academically online than interacting with people. Meanwhile, the results were not varied based on the respondents' age, levels of study, religion, and gender. It is necessary to develop a sound and wide range of activities that will reduce cyber relation addiction, which in turn promote psychological wellbeing among undergraduates. Interpersonal relationship skills training should be conducted for cyber-addicted adolescents to observe its impacts on cyber relational addiction.

Keywords: influence; internet over-reliance; social interaction; university students

Abstrak: Meningkatnya penggunaan ruang siber dalam beberapa tahun terakhir mengakibatkan tingginya penggunaan patologis ruang siber, terutama pada area kecanduan untuk berinteraksi melalui ruang siber. Penelitian ini bertujuan untuk menyelidiki dampak dari kecanduan untuk berhubungan melalui ruang siber terhadap hubungan interpersonal, serta bagaimana variable usia, agama, tingkat pendidikan, dan jenis kelamin memoderasi hubungan kecanduan ruang siber dan hubungan interpersonal. Penelitian ini menggunakan desain survei deskriptif dan kuesioner yang dirancang sendiri lalu disebarakan kepada 420 mahasiswa sarjana dari tujuh fakultas dari University of Ilorin, secara acak. Penelitian ini berfokus untuk menjawab sebuah rumusan masalah yang telah diuji pada 0.05 tingkat signifikansi. Data-data yang telah terkumpul diuji menggunakan beberapa uji statistik berupa Uji t dan Analisis of Variance (ANOVA). Hasil dari analisis data menunjukkan bahwa kebanyakan mahasiswa mencari informasi melalui interaksi pada ruang siber. Sedangkan hasil dari analisis pada variabel usia, tingkat pendidikan, agama, dan jenis kelamin menunjukkan hasil yang sama. Sehingga kita perlu mengembangkan berbagai kegiatan untuk mengurangi kecanduan berinteraksi menggunakan ruang siber, yang nantinya akan meningkatkan kondisi psikologis para mahasiswa. Selain itu, pelatihan keterampilan yang berhubungan dengan hubungan interpersonal harus juga diselenggarakan untuk mengetahui dampaknya pada para remaja dengan kecanduan untuk berinteraksi di ruang siber.

Kata kunci: pengaruh; ketergantungan internet berlebih; interaksi sosial; mahasiswa

INTRODUCTION

Information and Communication Technology has affected every aspect of human lives, most especially communication and interpersonal relationships. Meanwhile, the Internet has become an essential tool for social interaction, information, and entertainment. Cyberspace is an important avenue to link relations and friends living away, encounter fresh people, and even commence loving affairs. It facilitates closeness, interaction, and communication among people who prefer a faster, easier, and cheaper means of communication than phone calls or other means. Despite all of those positive things offered by the Internet, it can also lead to very negative outcomes, especially in interpersonal relationships with the surrounding people. However, as the Internet has been used in homes, schools, cafes, and businesses, Internet addiction has been increasing rapidly.

As the Internet continues to grow and evolve, it becomes an integral part of daily life (Christensson, 2015). Experience has shown that undergraduates get over-involved with the Internet especially when used for initiating connections. Internet addiction is described as the incapacity to manage the use of the Internet, resulting in undesirable outcomes in human day-to-day social and emotional operations (Shapira et al., 2003).

Recently, Internet addiction, especially among adolescents, has been recognized as an essential social issue in various countries because of the high prevalence of depression, aggressive behavior, psychiatric symptoms, and interpersonal problems associated with this addiction. According to the trend of interest in the study of internet addiction across the globe, it is clear that the phenomenon is not limited to a particular country (Sesar, Dodaj, & Jurisic, 2018), although some countries (South Korea) have pronounced it as a national health issue (Hartney, 2019). Studies on the frequency of internet addiction disclose 2% to 39% among adolescents and youth across countries of the world are addicted to the Internet (Berdibayeva et al., 2016; Durkee et al., 2012; Kuss, Griffiths, Karila, & Billieux, 2014; Moreno, Jelenchick, Cox, Young, & Christakis, 2011; Mustapha & Muhammed, 2017; Tsitsika et al., 2014).

Devoting enormous time online becomes a problem, causing people to neglect relationships, work, school, or other essential aspects of their life, such as decreased financial, psychological, and physiological functioning (A. Goldberg, 2008; Oakley, 2014). Stolz (2014) explains how social media is gradually destroying interpersonal relationships.

Internet addiction was first classified as a behavioral addiction by I. Goldberg (2004) with five categories ranging from cyber sexual addiction, cyber-relationship addiction, net compulsion, information overload, and addiction to interactive computer games (Addiction Valiant Recovery, 2014; Young, 2004).

Some general warning signs pointing to problematic internet use include frequently finding oneself on the Internet longer than one intended, having trouble completing tasks at work or home, isolation from family and friends because of the use of the Internet, feeling guilty or defensive about one's internet use and also feeling a sense of euphoria while involved in internet activities (Kim et al., 2010).

Adolescence is an essential period for developing a positive self-concept and self-identity by setting goals and exploring sound values. This period involves interaction with significant family members, friends, and others. Developing successful and appropriate interpersonal relationships become the basis of efficient social, occupational, and economic roles. Therefore, when an effective relationship is not adequately developed during this stage of life, various mental and adaptation problems can arise, such as depression, anxiety, aggressiveness, mal-adaptiveness, and so forth (Akin & Iskender, 2011). People who do not have good interpersonal relationships in the real world may depend on the Internet for communication and entertainment needs. Internet-addicted adolescents were shown to have more positive, accepting, and intimate relationships on the Internet compared with adolescents without Internet addiction. It was also reported that adolescents who were addicted to relationships on the Internet have lower self-efficacy and self-esteem compared with adolescents without Internet addiction, and this propelled them to meet their social needs through online relationships rather than real-world relationships (Lee, 2003).

Interpersonal bonds occur between two or more individuals who relate with each other and accomplish specific or more concrete or psychological desires. Thoits (2010) reported that less complex life issues may be experienced by individuals with intimate mutual bonds. Thoits further reported that intimate psychological links and relationships may advance a feeling of well-being and security that decrease life strains and improves sound physical and mental health. If such a relationship is severed due to undue clinging to internet addiction, the opportunities for interpersonal relationships may be denied.

Finally, online relationships that develop due to profound internet use can often be more intense than those in real life. Fantasies are given free rein, while the idea of being with online love can exceed all realistic expectations, thereby sustaining the internet addict's motivation to spend more and more time with their online friends. This disrupts and affects real-life relationships (Leung & Lee, 2012). People also lie about their status concerning their employment, height, age, financial situation, and so forth to their online friends. When the real-life person fails to match the online qualities, it can create profound emotional disappointment that affects their interpersonal relationships (Akin & Iskender, 2011).

The impact of cyber relational addiction on the interpersonal relationship among undergraduates include disruption of family relationships due to the reduced time spent with family, reluctance to perform family duties such as doing household chores, and an increase of conflicts with family in the negotiation for time spent on the Internet. Most young people prefer online excitement to intimacy with friends in real life. They spend more time on social networks, such as chat rooms, Facebook, Twitter, and so forth, which impede their relationship with their parents, siblings, and friends in real life.

Cyber relational addiction has affected a lot of students as they prefer the online relationship to real life (Bellamy & Hanewicz, 2001; Berdibayeva et al., 2016; Seo, Kang, & Yom, 2009; Shek, Sun, & Yu, 2013). For instance, Shek et al. (2013) reported that students' source of information is mostly online, compared to communicating with their peers who may have the real information they need at hand. Among the frequent internet users, which accounted for 49.6% of the whole sample, the percentages of participants classified as internet addicts and at risk of internet abuse were 4.02% and 17.66%, respectively. Bellamy and Hanewicz (2001) further revealed the significant moderating influence of gender on respondents' communication and personal relationship variables. However, Milani, Osualdella, and Di Blasio (2009) found no significant differences between males and females in interpersonal relationships and internet addiction, thereby showing inconclusive results on the influence of gender.

Besides, internet addicts often suffer from severe psychological distress, such as depression, anxiety, compulsivity, feeling of self-effacement, fear that life without the Internet would be boring, empty, and joyless, as well as feelings of loneliness and social isolation (Akhter, 2013). Kaltiala-Heino, Lintonen, and Rimpelä (2004) found that serious relationship problems were reported by 53% of internet addicts. Marriages, dating relationships, parent-child relationships, and close friendships were found to be seriously threatened by internet addiction across all age groups. Shields and Kane (2011) also found a significant negative relationship between internet use and the quality of relationships between parents and significant others.

The findings of this study provide indicators of cyber-relation addiction that are prevalent among undergraduates in Nigeria for university counsellors. Furthermore, it reports the impacts of such addiction on the students' interpersonal relationships. Therefore, it allows counsellors on the implication of such impacts on their practice.

However, studies on the impact of cyber relational addiction on the interpersonal relationship of undergraduates in the Ilorin metropolis have not been mostly investigated. Therefore, this study focuses on the influences of cyber relational addiction on undergraduates' interpersonal relationships. To guide the investigation process, it was hypothesized that gender, age, level of study, and respondents' religion would not significantly moderate the influence of cyber relational addiction on the interpersonal relationship of undergraduates in Nigeria.

METHOD

Research Design

This study was a descriptive survey focusing on the influence of cyber relational addiction on the interpersonal relationship of undergraduates students in Nigeria. This design was selected as it inquired the opinion of undergraduates on the impression of cyber relational addiction on their interpersonal relationships.

Research Sample

The population for this study was all undergraduates of the University of Ilorin, Nigeria, in the 2017-2018 academic session. According to University Annual Report (2020), the total number of undergraduate students at the University of Ilorin was 52,189 in the fifteen existing faculties. Seven (7) faculties were selected using a simple random sampling technique. Thus, the target populations were 100-400 level undergraduates in the selected faculties, respectively. The sample was made up of female (146) and male (274) undergraduates between the ages of 15 to 26 years old. The sample consisted of undergraduates across 100 and 400 levels selected from the three dominant religions in Nigeria. The consent of the participants was sought, and their decision to participate was voluntary.

The study sample was considered appropriate because the target respondents extensively used the Internet for interaction and instruction. Thus, it was used to seek information from people who were directly involved in the situation under consideration.

Research Instrument and Procedures

The study used a questionnaire entitled “Influence of Cyber Relational Addiction on Interpersonal Relationship,” consisting of two parts. The first part required the respondents to give some background information such as gender, age, level, and religion. Meanwhile, the second part contained items seeking undergraduates’ perceptions on the influence of cyber relational addiction on interpersonal relationships.

The content validity of the questionnaire was determined by five experts, who were Counsellor Educators. The corrections and comments were affected, and the final draft was adjudged valid. A test re-test method was used to establish the reliability of the instrument at an interval of four weeks. Pearson’s Product Moment Correlation (PPMC) of the two sets of scores obtained yielded a coefficient of 0.75, showing that the test was reliable.

Copies of the questionnaire forms were personally administered by one of the researchers in the selected tertiary institution so that we could explain the instruction to the respondents. Besides, it also encouraged the creation of rapport between the researcher and the respondents. The questionnaire was patterned after four points Likert-type scale ATM (Always true of me), STM (Sometimes true of me), RTM (Rarely true of me), and NTM (Never true of me).

Method of Data Analysis

The data analysis of the study was carried out using descriptive and inferential statistics. The demographic data were analyzed using percentages, while the null hypotheses were analyzed using inferential statistics at 0.5 levels of significance. To calculate the percentage, the four scales were merged into two distinct categories. True of me was used to capture “Always true of me” and “Sometimes true of me,” while Not true of me captured “rarely true of me” and “never true of me.” Hypothesis 1 was analyzed using a t-test, while hypotheses 2, 3, and 4 were analyzed using ANOVA.

RESULTS

Research Question: What influence do Cyber relational addiction have on the interpersonal relationship of Respondents

Table 1 presents the percentage of interpersonal relationships of respondents experiences influenced by cyber relational addiction.

Table 1. Percentage and Rank Showing Respondents' Expression on Cyber Relational Addiction

Item No.	As far as I am concerned:	TM F (%)	NTM F (%)	Rank
1	I ignore my relationship with people when I am online	212 (50.5)	208 (49.5)	6 th
2	I often prefer the online excitement to intimacy with friends in real life	214 (51.0)	206 (49.0)	5 th
3	I often form new relationships online with fellow users than real life relationships	191 (45.5)	229 (54.5)	11 th
4	Online relationship tends to enhance my self-esteem than interpersonal relationship	127 (30.2)	293 (69.8)	18 th
5	I spend more time online than going out with others	207 (49.3)	213 (50.7)	7 th
6	I like to express myself more on internet than face to face interaction	256 (61.0)	164 (39.0)	4 th
7	I like sourcing information more on internet than interacting with people	311 (74.0)	109 (26.0)	1 st
8	Significant others in my life do complain about the amount of time I spend online	202 (48.1)	218 (51.9)	10 th
9	Interaction with real life person cannot be equated to online interaction	284 (67.6)	136 (32.4)	3 rd
10	Chatting online sometimes with my friends affects my communication skill in face-to-face interaction	122 (29.0)	298 (71.0)	19 th
11	I seem not to recognize long term friends who are not internet oriented	159 (37.9)	261 (62.1)	14 th
12	Surfing the Internet with my friends enhances privacy more than real life	203 (48.3)	217 (51.7)	9 th
13	I find it difficult to socialize with people as a result of internet addiction	140 (33.3)	280 (66.7)	17 th
14	I gain more academically online than interacting with people	294 (70.0)	126 (30.0)	2 nd
15	I ignore anything happening around me whenever I am online	171 (40.7)	249 (59.3)	13 th
16	I drop friends who are not willing to join me in cyber activities	149 (35.5)	271 (64.5)	15 th
17	I prefer to gather information about life from online friends than from real-life friends	205 (48.8)	215 (51.2)	8 th
18	I tend to remember online friends than physically seen ones in recent times	183 (43.6)	237 (56.4)	12 th
19	I neglect my friends in real life but enjoy a relationship with those in cyber space	145 (34.5)	275 (65.5)	16 th
20	I have become more aggressive to others since I started cyber interactions	111 (26.4)	309 (73.6)	20 th

Hypotheses Testing

Four research hypotheses were postulated for this study. The obtained data were tested using a t-test and Analysis of Variance (ANOVA) at 0.05 alpha levels. The analysis results for each hypothesis are discussed next.

Hypothesis One: There is No Significant Different Influence of Cyber Relational Addiction on the Respondents' Interpersonal Relationships Based on Their Gender

Table 2 shows a calculated t-value of 1.68 with a p-value of .093, the p-value of .09 is greater than 0.05 alpha levels. Thus, the null hypothesis, which stated that there is no significant different influence of cyber relational addiction on the respondents' interpersonal relationships based on their gender, was retained.

Table 2. Mean, Standard Deviation and T-test Showing Gender Differences Effects on the Influence of Cyber Relational Addiction on Interpersonal Relationships

Gender	N	Mean	SD	Df	Cal. t-value	P-value
Male	274	49.52	15.043	418	1.68	.093
Female	146	46.88	15.746			

Hypothesis Two: There is No Significant Different Influence of Cyber Relational Addiction on Respondents' Interpersonal Relationships Based on Their Age

Table 3 shows the calculated F-ratio of 1.23 with alpha .114, which is greater than 0.05 levels of significance. Hence, there was no significant different influence of Cyber relational addiction on the undergraduates' interpersonal relationships based on their age.

Table 3. Analysis of Variance (ANOVA) Showing Age Effects on the Influence of Cyber Relational Addiction on Respondents' Interpersonal Relationships

Source	df	SS	Mean Square	Cal. F-ratio	Sig.
Between Groups	2	17696.642	8848.321	1.23	.114
Within Groups	417	80698.158	7193.521		
Total	419	98394.800			

Hypothesis Three: There is No Significant Different Influence of Cyber Relational Addiction on the Respondents' Interpersonal Relationships on the Basis of Their Study Level

Table 4 shows the calculated F-ratio of 0.90 at .096, more significant than 0.05 alpha levels of significance. Therefore, the hypothesis stated that there is no significant different influence of cyber relational addiction on undergraduates' interpersonal relationships on the basis of their study level was accepted.

Table 4. Analysis of Variance (ANOVA) Showing the Respondents' Influence of Cyber Relational Addiction on Interpersonal Relationships Based on Study Level

Source	df	SS	Mean Square	Cal. F-ratio	Sig.
Between Groups	3	31466.854	1048.951	0.90	.096
Within Groups	416	66927.946	1160.884		
Total	419	98394.800			

Hypothesis Four: There is no Significant Different Influence of Cyber Relational Addiction on the Respondents' Interpersonal Relationships on the Basis of Religion

Table 5 shows the calculated F-ratio of 2.44 at .088, more significant than 0.05 alpha levels of significance. The null hypothesis was accepted, signifying no significant different influence of cyber relational addiction on the undergraduates' interpersonal relationships on the basis of religion.

Table 5. Analysis of Variance (ANOVA) Showing the Respondents' Experienced Influence of Cyber Relational Addiction on Their Interpersonal Relationships Based on Religion

Source	df	SS	Mean Square	Cal. F-ratio	Sig.
Between Groups	2	1142.513	571.257	2.44	.088
Within Groups	417	97252.287	233.219		
Total	419	98394.800			

DISCUSSION

This section discusses the impact of cyber relational addiction on the interpersonal relationships of undergraduates in a Nigerian university. As the Internet has been used in homes, schools, Internet cafes, and businesses, the prevalence of Internet addiction has been rapidly impacting critical social issues (aggressive behavior, depression, psychiatric symptoms, and interpersonal problems) across countries of the world. The study was quantitative in nature as it considered the opinions of 420 randomly selected undergraduates in a Nigerian university regarding the impact of cyber relational addiction on their interpersonal relationships.

The analysis of the 20 items on the influence of cyber relational addiction on interpersonal relationships of undergraduates showed that cyber relational addiction had affected the interpersonal relationships of a considerable number of them. A substantial number of undergraduates prefer to find information online than through interacting with people. They believe they can gain more information academically online than by relating with one another. Besides, they also mention that interacting online cannot be equated with real-life interaction, while most of them like to express themselves more on the Internet than face to face interaction. They opined that surfing the Internet with their friends enhances their privacy more than in real life.

The findings of this study are in line with a previous study carried out by Kaltiala-Heino et al. (2004), which found that serious relationship problems are reported by 53% of internet addicts. They found that close friendships are seriously threatened by internet addiction. Respondents are found to gradually spend less time with people in their lives in exchange for solitary time in front of a computer. Shields and Kane (2011) also found a significant negative relationship between internet use and the quality of relationships with parents and significant others. This can explain why some students who depend too much on internet communication miss examinations and other significant events on campus if their phones are dead or do not have a subscription. They fail to discuss important issues even if they meet face-to-face prior to the test, lecture time, or even examination. Also, the importance of group discussion as a means of learning has been played down among many undergraduates. This really narrows the level of interpersonal relationships among undergraduates, which can affect other important interactions like parent-child, marriage, and work relationships if not addressed on time.

Hypothesis one revealed no significant different influence of cyber relational addiction on the undergraduates' interpersonal relationships was observed based on their gender. This result corroborates Milani et al. (2009), who found no significant gender difference. However, this result contrasts with Bellamy and Hanewicz (2001) that revealed the vital role of gender in moderating the influence of internet addiction and interpersonal relationships. It may be caused by the former considered varying forms of internet addiction and may not be limited to cyber relational addiction alone.

Hypothesis two revealed no significant different influence of cyber relational addiction on the interpersonal relationship of the undergraduates based on their age. Similarly, Kaltiala-Heino et al. (2004) report no effect of age differences, but Wu et al. (2013) found younger students experience a significant reduction in addictive internet use with better parental interaction than older students. The reason for the non-significant difference among different age groups can be justified by the increasing need and availability of Internet and smartphones across age groups, most especially students in tertiary institutions who need to use the Internet for personal interaction and instructional purposes.

Hypothesis three revealed no significant difference in the influence of cyber relational addiction on the interpersonal relationship of the undergraduates based on class level. This result does not corroborate earlier findings. For instance, Okwaraji, Aguwa, Onyebueke, and Shiweobi-Eze (2015) found variations in internet addiction and depression among their respondents with different periods of study, with more final year students showing signs of severe addiction and levels of depression than the others. Students across levels of education utilize the Internet for scheduling classes, sharing information quickly, connecting with old friends, and forming new relationships. Hence, they differ not in their over-involvement but in how it has affected their relationship with others.

Cyber relational addiction affects the interpersonal relationship of undergraduates from various religious backgrounds. The finding is similar to previous findings (Ajiboye, 2016; Ayoola, 2017; Oketade, 2013); Ajiboye (2016) revealed that teachers from varying religious backgrounds do not have a different perception of the influence of social media on the behaviors of secondary school students in Osun State. Similarly, Ayoola (2017) found no effects of religious differences in the influence of social media on sexual behaviors of undergraduates of Kwara State. However, the findings of the study did not corroborate that of Okolu (2015), who found significant variation in the influence of communication styles and assertiveness skills on interpersonal relationships of tertiary institution students in Kwara State.

Undergraduates reported a remarkable likeness for self-expression online than face-to-face interaction, which can be an indication of deficiency in interpersonal relationship skills. Therefore, the counsellors in the university in Nigeria need to start initiating interpersonal relationship skills development programs to help undergraduates learn appropriate interpersonal relationship skills that promote social adjustment.

Undergraduates' preference for gathering information about life from online friends than those physically present may not allow them to get applicable facts to their current setting, affecting their life decision. Accordingly, the counsellors have to develop an intervention to help undergraduates to balance their online social interactions with real-life interactions to ameliorate their over-reliance on the Internet for handling important life relations.

The echoing preference for achieving excitement online to intimacy with friends in real life is a strong indication of cyber relation addiction. It has added to the sparse literature on the impact of cyber relational addiction among undergraduates. The counsellors in the university should sensitize these undergraduates on the various challenges associated with online social interactions and living styles, such as online harassment, online dating problems, and fraud activities.

CONCLUSION

Our analysis results suggest that students primarily sourced information on the Internet rather than interacting with people. Also, undergraduate students gain more academically online than by interacting with people. Age, gender, level of study, and religion did not significantly moderate the influence of cyber relational addiction on the interpersonal relationship of the undergraduates.

On the basis of the results obtained from this study, the following recommendations are made. It is necessary to develop a sound and wide range of activities that promote face-to-face interaction among undergraduates. Meanwhile, the counsellors should sensitize all undergraduates, regardless of their age, gender, and level of study, on the appropriate use of social media and the dangers embedded

in overdependence on using it for social interaction in lieu of real-life interaction. Interpersonal relationship skills training should be conducted for cyber-addicted adolescents to observe its impacts on cyber relational addiction.

Future research can compare students' and lecturers' views on the impacts of cyber relational addiction on the undergraduates' interpersonal relationships. Other studies can also inquire into how cyber relational addiction impacts other personality constructs like self-esteem or the interpersonal relationship of undergraduates who are cyber relational addicted and those who are not.

This study employed a quantitative approach. Although a qualitative approach can afford an in-depth understanding of the impacts of cyber relational addiction on the undergraduates' interpersonal relationships and other circumstances surrounding their interpersonal relationships, the use of quantitative data in this study does not render the findings invalid.

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