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THE EFFECT OF SOCIAL SKILL THERAPY ON THE INTERNET ADDICTION OF UNDERGRADUATES IN A NIGERIAN UNIVERSITY

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ABSTRACT

The efficacy of social skill therapy (SST) for ameliorating internet addiction was tested among young Obafemi Awolowo University students. A total of 1,448 students were selected to participate in the study. The Internet Addiction Test was employed in the collection of data. The data collected were analyzed using percentages and analysis of covariance. A significant effect of SST [$F_{(1, 59)} = 82.243$, $p < 0.05$] on Internet addiction was found. The study concluded that SST was an effective therapy for ameliorating Internet addiction among students.

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1. INTRODUCTION

Internet addiction continues to be one of the major problems affecting the academic life and mental health of students all over the globe, and because of that, it is gaining more attention from therapeutic help providers and other mental health experts. Internet addiction can be described as excessive or poorly controlled preoccupations, urges, or behaviors regarding computer use and internet access that can lead to impairment or distress. Internet addiction covers a lot of impulse-control problems, which include cybersex, cyber-relationships, net compulsions, information overload, and computer addiction (Joanna et al., 2014). The devastating effects of internet addiction on students' lives include social isolation, family discord, academic failure, academic under-achievement, academic probation, and even expulsion from schools (Kim et al., 2010; Wang et al., 2012).

Due to the social nature of human beings, particularly university students, and the social environment of university campuses, students may be at risk of internet addiction if steps are not taken to lessen the magnitude of its manifestation and professional helpers are not aware of the effective psychological interventions that can be used to help internet addicts. During the past decade, there have been tremendous efforts by

researchers to investigate the effect of various treatment techniques on internet addiction. However, information on whether social skill as an intervention method is effective in ameliorating internet addiction is limited in the addiction literature.

Treatment of addiction with the use of social skill therapy (SST) is not as popular as other cognitive behavior therapy that has been established. The basis of social skills therapy in psychotherapy was influenced by social learning theory developed by Bandura (1969), and operant conditioning methods have been successfully used for the complete spectrum of human learning ever since, as has behavior therapy. The principles guiding social skills training place particular emphasis on the value of establishing precise expectations and instructions, coaching the person through frequent prompts, using modeling or vicarious identification, involving people in role-playing or behavioral practice, and providing a lot of positive reinforcement for social behavior improvements.

When deficits and ineptitudes in human relationships are reflected through awkwardness, poor impulse control, and offensive habits and behaviors, resulting in rejection and social isolation, an appropriate treatment that can be designed around the behavior therapy principle to overcome social and self-care deficits is social skills training (Wolberg, 2013). With the least amount of assistance from members of the helping professions, people with severe and persistent mental illnesses like addiction are helped to "perform those physical, emotional, social, vocational, familial, problem-solving, and intellectual skills needed to live and learn." Training in social skills is used to help people acquire certain talents that are lacking in them or that will make up for them. People who exhibit addictive behavior and chronic mental problems sometimes struggle to fulfill even the most fundamental social obligations. They frequently lack the abilities to live alone, have poor personal cleanliness, have difficulty managing time and money, and are frequently socially isolated.

Although minimal empirical facts on the effectiveness of social skills training on internet addiction are provided in the available literature on addiction (Affouneh et al., 2021), this may be because internet addiction is still a relatively current issue. For instance, some studies have explored the relationship between internet addiction and behavioral issues (Chou et al., 2017; Jenaabadi & Fatehrad, 2015), while few experimental studies that have established the efficacy of social skill therapy were limited to children and adolescents (Epstein et al., 2015; Chou et al., 2017; Larose et al., 2020; Kacar & Ayaz-Alkaya, 2022). However, the effectiveness of social skills treatment for mental health conditions including addiction, schizophrenia, and other severe and chronic mental problems is nevertheless backed by a substantial body of research (Liberman, Kopelowicz, & Smith, 1999; Kopelowicz, Liberman, & Zarate, 2006) but limited to children and adolescents. In other words, there is consistent evidence from research on children and adolescents that social skill therapy is effective in reducing the incidence of autism spectrum disorder, social isolation, and bullying among children and adolescents (Erwin, 2016; Mitchel, Regehr, & Felman, 2010). However, empirical evidence about the efficacy of social skill therapy, especially from research with adults suffering from problematic use of the internet, is limited in the

addiction literature. Probably due to the role play, which is one of the major activities involved in the application of social skill training, which children and adolescents may find fun during the process.

According to Wolberg (2013), activities that must be covered in social skills training are assertiveness training (behavior rehearsal), role-playing, vicarious identification (modeling of internet-appropriate behavior), self-control skills, homework assignments, and self-evaluation in terms of self-observation, which must be well documented in the daily internet log. For instance, during behavior rehearsal, the counselor might serve as an example of proper assertive behavior and urge the client to repeat a graded series of comparable behaviors (Alberti & Emmons, 2001). The key to effective self-regulation of behavior is self-monitoring, which calls for assisting the client in setting objectives or standards that direct behavior, following through on policies, and using self-reinforcement to improve the possibility that the new and appropriate behavior will be maintained. Self-instructional training, as described above, is often used as a self-control method for coping with impulsivity such as addictive behavior and stress among people. From the foregoing, if proper practical guidelines are applied, the SST may be considered appropriate for ameliorating internet addiction since internet addiction is induced by environmental and social factors.

Relatedly, evidence has shown that pathological use of the internet is associated with fear of face-to-face interaction with people (Lee, 2013), gambling (Lupo, 2022), and suicidal ideation (Cheng et al., 2018; Durkee et al., 2016). These problematic issues are more frequent among socially isolated young people, and men have been found to be more exposed to internet addiction (Yang & Tung, 2007). Social skill therapy (SST) has been established as a treatment technique for mitigating the negative effects of addiction because of its focus on the social and environmental factors that promote clients' well-being (Wolberg, 2013). Empirical work with respect to social skill therapy on internet addiction is indeed one of the most under-researched areas in counseling and psychotherapy. Would social skill therapy be effective in ameliorating internet addiction among undergraduates given the internet explosion in the world, the typical university environment in Nigeria, which offers opportunities for a high level of social networking, and the permissive lifestyle of undergraduate students?

In Nigeria, clinically tested and empirically established counseling interventions that can be used to mitigate the negative effects of pathological internet use on students' physical, mental, and population health as well as on their academic lives are required for the improved overall well-being of young adults in Nigerian universities. Adequate knowledge of professional counselors on the clinical procedures that can be applied to assist internet addicts with the application of SST becomes necessary. Also, evidence-based research on the effects of social skill therapy, which can be relied upon if applied to assist students with internet addiction, is required to further advance the professional skills of counselors and counseling research; hence, this study was designed to examine the use of social skill therapy for the amelioration of internet addiction among students of Obafemi Awolowo University, Ile-Ife, Nigeria.

Research Hypotheses

To achieve the study objective, it was hypothesised that:

H0: SST will not be significantly effective in ameliorating Internet addiction among OAU students.

H1: SST will be significantly effective in ameliorating internet addiction among OAU students.

2. METHOD

This research work made use of the pre-test and post-test experimental control group designs. In adopting this design, participants are expected to be assigned to experimental and control groups by random assignment, given a pretest on the dependent variable, and treatment is introduced only to the experimental subject (Ary et al., 2006). This design was considered appropriate for the study and was adopted. The eligible participants were assigned to the experimental and control groups and given a pre-test on the dependent variable (internet addiction). Subsequently, the treatment (social skill therapy) was introduced only to the experimental participants. In contrast, anti-sexual harassment training was introduced as a placebo for the control group to make them fully engaged throughout the period of the experiment. Thereafter, the experimental and control groups were measured on the dependent variable using the Internet Addiction Test (IAT) as a post-test after the experiment. The researcher then compares the groups on the post-test. The experimental design of the study is presented in Table 1.

Table 1. Experimental study design: Pre-test, post-test control group design

Group	Pre-test	Independent Variable	Post-test
A_e	O_1	X_1: SST	O_2
B_c	O_3	X_c: Placebo	O_4:

From Table 1, X_1 and X_c are treatment and control groups respectively. O_1 and O_3 represent the pre-test score for experimental groups A_e control group B_c while O_2 and O_4 the post-test scores. Furthermore, X_1 represents Treatment: Social Skill Therapy (SST); X_C represents Placebo/Control.

The whole undergraduate student body of Obafemi Awolowo University (OAU) made up the study population. There were 22,313 undergraduate students enrolled in OAU courses as of the commencement of the Harmattan Semester in the 2014–2015 academic year, according to data made accessible by the university computer center. A letter of consent requesting the undergraduate student population was sent to the OAU Dean of the Division of Students' Affairs, who approved the request to obtain accurate and trustworthy statistics on the undergraduate population at OAU. A sample of 1,448 students was selected for the study using proportional sampling techniques, and this sample represents 6.5% of the population of undergraduate students at Obafemi Awolowo University. Given the sample size determination technique devised by

Bartlett, Kotrlik, and Haggins (2001), which called for a minimum of 1438 at a 95% confidence level, this sample size (1,448) was deemed suitable and sufficient for the investigation.

The participants were selected in phases. In the first phase, the proportionate sampling technique was used to select 6.5% of the total population of students in each faculty. This was done to ensure adequate representation of participants concerning the population size in each faculty. A questionnaire was given to the participants to fill out to determine whether any of them were Internet addicts. In the second phase, only 80 respondents found to exhibit a severe level of Internet addiction were sorted out, listed using the number assigned to them on the questionnaire, and invited to participate in the treatment program. Out of the 80 respondents invited, 67 honored the invitation and participated from the beginning. These 67 participants were systematically assigned to two groups. Specifically, the first two participants in the sampling frame were labeled one to two, and these numbers were assigned to others systematically in the same order, making two different groups. Following this selection, 34 participants were assigned to SST, while 33 were assigned to the control group. One of these groups was subjected to treatment, while the second group was the control group. The experimental group A was subjected to SST, while the control group was subjected to a placebo. However, only 63 out of 67 participants were able to participate until the end of the treatment program.

Only one research instrument was used to collect data for the study. It was “the Internet Addiction Test” (IAT). The Internet Addiction Test (IAT), one of the most frequently used tools to measure Internet addiction, was first designed by Young (1998). It has been rewritten in many languages, including English, Greek, Italian, French, Turkish, Chinese, and Korean (Yang *et al*., 2005; Chang & Law, 2008; Khazaal e*t al*., 2008; Young & Nabuco de Abreu, 2011; Panayides & Walker, 2012), and can be adapted and applied in outpatient, inpatient, and other clinical settings like counseling psychology (Young & Nabuco de Abreu, 2011). There are two parts to it. General information about respondents is provided in the first section. These include sex, age, academic standing, field of study, religion, location, and Internet browsing method. Twenty items in the second section of the questionnaire cover six probable causes of Internet addiction. They are salience, excessive usage, carelessness regarding obligations, a sense of suspenseful expectation, weakened self-control, and carelessness regarding one's social life. The device's purpose is to gauge how frequently using the Internet results in undesirable circumstances. Young (1998) originally designed this instrument with twenty separate components. The research used all the changed components. A five-point Likert scale with the options "Does Not Apply" to "Always" was used to ask participants to rate the items in this section. For "Does Not Apply," "Rarely," "Occasionally," "Frequently," "Often," and "Always," respectively, the items received scores of 0, 1, 2, 3, 4, and 5, respectively.

Based on Young's (1998) scoring on the original version of the IAT and as applied in this study, participants were divided into four levels of Internet addiction because of this classification. Participants who scored between zero and nineteen (0–19) on the IAT were classified as using the Internet normally, whereas those whose scores fell between

20 and 49 were seen to be showing signs of mild Internet addiction. They were regarded as typical Internet users; while they occasionally browse for a little too long, they have control over it. A high degree of Internet addiction was defined as scores between 50 and 79. Due to their Internet usage, this group of participants frequently encounters some issues, but not serious ones. Scores between 80 and 100 were considered to indicate a severe level of Internet addiction. They require either medical or psychological assistance since their use of the Internet is directly leading to serious difficulties in their lives. For this study, however, only those whose scores were within 80–100 was invited to participate in the experimental program.

The Health Research Ethics Committee (HERC) of Obafemi Awolowo University received an application for approval of the research plan to carry out the research in compliance with established standards, rules, and laws. Following a thorough committee examination, the study proposal received complete approval (IPHOAU/12/885). The study was then carried out in accordance with the established procedures. Together with two research assistants, the researcher administered the instrument.

Pre-treatment: To apply effective therapies, the participants' current use of the Internet was determined first. This was achieved by administering IAT to the participants. Following this, analysis was done, and only individuals who showed signs of serious Internet addiction and agreed to take part in the experiment were invited. Thereafter, the consent of all volunteered participants was obtained using an informed consent form approved by the HREC. A period of six weeks was used for the treatment exercise. A Daily Internet Log was used to access participants' use of the Internet through their computers and phones. The participants were instructed to keep track of each Internet session's date, time, location, the events that occurred before getting on, the sort of online activity accessed (such as email, chat, gaming, pornographic sites, eBay, or web browsing), and the duration in minutes or hours. Additionally, the participants had to explain the result of the online session in terms of the tasks that were finished and the ones that had to be put on hold. Finally, following each online session, the participants' feelings were recorded to identify the online behaviors, circumstances, and feelings that are most likely to lead people to use the internet excessively.

Treatment Stage: Prior to the initial commencement of the treatment, all participants were asked to read and sign the informed consent form. After the completion of the pre-test assessment, 80 participants who exhibited Internet addiction were apportioned into two groups. The participants in the SST group were treated using the Social Skill Treatment Package (Appendix II), while those in the control group were warned about the dangers associated with examination malpractice. After the completion of the experimental program, both the treatment and control groups were required to respond to the IAT again. *Post-Training Stage:* To prevent relapse and withdrawal symptoms, there was follow-up with the participants from time to time.

Microsoft Excel 2007 and the Statistical Package for Social Sciences (SPSS 20) software programs were utilized to organize and manage all the data gathered for the study. Descriptive statistics were used to answer the research questions raised, while

analysis of covariance (ANCOVA) was used to test the hypothesis postulated in the study.

3. RESULTS AND DISCUSSION

3.1 Results

Hypothesis: There is no significant effect of SST on reducing internet addiction among participants. In testing this hypothesis, the pretest and posttest scores on the internet addiction test of participants in the SST and control groups were computed and subjected to ANCOVA. This was done by examining the effect of SST on internet addiction among participants. The results are presented in Table 2.

Table 2. Analysis of covariance showing the effect of SST on internet addiction

Source	Type III Sum of Squares	Df	Mean Square	F	p
Corrected Model	22045.504[a]	2	11022.752	41.590	0.000
Intercept	1197.978	1	1197.978	4.520	0.038
PRE	31.032	1	31.032	.117	0.733
Treatment	21797.410	1	21797.410	82.243	0.000
Error	15902.210	60	265.037		
Total	231837.000	63			
Corrected Total	37947.714	62			

a. R Squared = 0.581 (Adjusted R Squared = 0.567)

Dependent Variable: Posttest score on internet use

Table 2 shows no significant difference in the participants' pretest scores, indicating no bias in the selection of the research participants with regard to their scores on the internet addiction test. It, however, shows that treating participants with SST in comparison to those in the control group is significantly effective in reducing internet addiction [$F(1, 60) = 82.243$, $p < 0.05$]. As a result, the hypothesis is disproved, and it is thus possible to conclude that SST significantly decreased participants' Internet addiction. The results further showed that the model built for the treatment yielded an R-squared value of 0.581 and an adjusted R-squared value of 0.567. This implies that the model can explain at least 56.7% and at most 58.1% of the variance observed in the reduction of internet addiction among the participants. In other words, 56.7% was the minimum severe level of Internet addiction observed in the participants due to the application of SST. In addition to this, the pretest and posttest scores of participants in the SST and control groups were further subjected to descriptive statistics to determine the mean difference between the two groups. The results are presented in Table 3.

Table 3. Descriptive statistics of SST and control group Descriptive Statistics

	SST		Control	
	Pre-test	Post-test	Pre-test	Post-test
Number of participants	34	31	33	32
Mean score	74.47	36.48	75.15	73.88
Std. Deviation	6.67	13.83	7.84	18.13

	SST		Control	
	Pre-test	**Post-test**	**Pre-test**	**Post-test**
Range	25	67	23	57
Minimum score	66	0	65	43
Maximum score	91	57	88	100

As shown in Table 3, participants who were subjected to SST and those subjected to control had almost the same higher mean score on their pretest of the internet addiction test (74.47 for SST and 75.15 for control). There was, however, a mean difference in their post-test scores, as those participants who were subjected to SST training had a lower mean score (36.48) than those in the control group (73.88). With this mean difference, it is an indication that SST is effective in reducing internet addiction among participants.

3.2 Discussion

The focus of this research was to investigate the effect of social skill therapy on internet addiction among young OAU students. The researcher believed that if this were established empirically, it would further enhance the development of appropriate guidance and counseling interventions and services for internet addicts. Following the existing evidence in the addiction literature, social skill therapy is a good treatment for children and adolescents who are socially deficient and may find it very difficult to interact and relate with others in the real social world (Liberman et al., 2006; Mueser & Bond, 2000). Due to the power of social networking, which is potent enough to bring people together irrespective of distance and the availability of internet facilities, the researcher attempted to challenge some of the findings that favor the use of social skills for children and adolescents, even though there may be many more adult groups that may also exhibit some psychological and mental-related issues that may require the application of social skill therapy for better improvement than any other psychological treatments. This is why some students who were confirmed to exhibit internet addiction were subjected to SST.

The study's findings supported the theory that SST significantly reduced students' internet addiction. This finding has disproved one of the limitations associated with the application of SST. Available evidence from the literature in the area has shown that SST is more suitable for treating mental-related disorders commonly experienced by young children and adolescents. For example, SST has been confirmed as a suitable psychotherapy for disorders like hyperactivity, binge eating disorder, and loneliness involving children and adolescents' populations, but may not be an effective treatment technique for adults (Gresham et al., 2001; Quinn et al., 1999). The effectiveness of SST may be determined by the components built into it.

The components of SST that could have contributed to its effectiveness include role-playing (simulation), modeling of healthy and appropriate internet behavior, assertiveness training, and homework. In role-playing, for instance, participants were asked to demonstrate how an internet-addictive behavior is exhibited by somebody around them by imitating the person. This allows other participants to observe the

scenario and judge themselves in the same way. In assertiveness training, participants were taught how to reduce the degree of internet addictive behavior by setting limits and telling themselves that they would not get addicted to the internet. Participants demonstrated this using a role-playing approach during the session.

In addition to being competent to facilitate successful interactions with clients, SST is a key to many of the experiences that enrich life, such as having friendships, participating in recreational activities, or joining groups. Therefore, the results of this study tend to corroborate those of other studies, which show that social skill training is effective for mental disorders like addiction, schizophrenia, and other serious impulse control disorders (Liberman et al., 2006) among children, adolescents, and adults.

4. CONCLUSION

In this study, an investigation of the efficacy of social skills in reducing internet addiction was carried out. Following the social nature of human beings and the social environment of the university campuses, the efficacy of social skill therapy was tested on internet addiction among OAU students. The study established that SST was an effective intervention for the amelioration of Internet addiction among undergraduate students. It is therefore recommended that the SST be applied by professional helpers to students who are suffering from Internet addiction. Application of this therapeutic procedure would help in reducing the problems associated with internet addiction and improving the overall well-being of students.

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