Strategies for Regulating Excessive Use of Smartphone among Agricultural Education Students in Universities in Abia State, Nigeria

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Abstract

The study evolved strategies for regulating excessive use of smartphone among Agricultural Education students in universities in Abia State, Nigeria. Specifically, the study determined perceived consequences of excessive use of smartphone as well as strategies which students, universities and parents could adopt in reducing excessive utilization of smartphone. Four research questions were answered and four hypotheses tested. The study adopted descriptive survey research design. The population of the study was 93 respondents, made up of 15 lecturers and 78 students of Agricultural Education in Abia State. Questionnaire was used for data collection. Data were analyzed using mean and t-test. Findings revealeight perceived consequences of excessive use of smartphone by Agricultural education students (Agric Ed). These include; reduces the academic performance of Agric Ed students ($\overline{X}$ = 4.16), reduces students interest in reading ($\overline{X}$ = 4.36), leads to a decline in the study habit of Agric Ed students ($\overline{X}$ = 3.64) and others. There are also eight strategies students could adopt for reducing excessive use of smartphones. These include, among others, read books to learn more about smartphone addiction and control ($\overline{X}$ = 7.71), control excessive use of smartphone by the use of role play ($\overline{X}$ = 4.43), set time limits to regulate the rate of use of the phone ($\overline{X}$ = 4.07). Other findings are nine stragtegies university could adopts. These including, specify time when servers should be on and off ($\overline{X}$ = 4.01), organize seminar/work for Agric Ed students on smartphone addicition ($\overline{X}$ = 3.94), forbid negligence arising from smartphone addiction among students ($\overline{X}$ = 3.79), among others. More findings are nine family related strategies including, parents should: ensure that children obey family guidelines on the ue of smartphone ($\overline{X}$ = 4.33), set clear guidelines on the use of smartphone ($\overline{X}$ = 3.94), and tell children the dangers of excessive phone use rather than hate them ($\overline{X}$ = 3.95). It was recommended among others that, the university management should work with students' leaders to regulate internet usage.

Keywords: Strategies, Regulating, Smartphone, Agricultural Education, Universities.

Introduction

Agricultural Education is the teaching of agriculture in formal institutions of learning such as the primary, secondary schools and tertiary institutions of learning, for the purpose of equipping learners with knowledge, skills and attitudes in agriculture. But, in universities, Federal Republic of Nigeria (FRN, 2014) provides that Agricultural Education is a teacher education programme in the universities which serves to train students to be classroom teachers, agriculturists and researchers. The teaching of agriculture is not limited to classroom instruction; it extends to field experience in the school farm, laboratory or workshop (Otetoobo & Onuka, 2021). According to Michael Okpara University of Agriculture Umudike (2019), Agricultural Education students offer courses in various fields of studies, including: Agriculture, Education, Languages and Applied Sciences. One important means of sourcing information for these courses is through the use of smartphone.

Smartphone is a hand held electronic device for accessing information. According to Kate (2023), smartphone is a portable device that could combine mobile telephone and computing functions into one unit. The device is a connected to a cellular network and the internet to perform diverse functions in Agricultural Education in any part of the world (Onuka, 2021; Ike, Iwu & Onwuagboke, 2015). The smartphone is used for diverse functions. For instance, Kate (2023), posits that smartphone is used to convert, store, protect, transmit and retrieve information. The phone is also used for playing games, listening to music, make or receive calls, take lectures, send or receive text messages, send or receive emails, or read news (Bialobrzeska & Cohen, 2015; Irby & Strong, 2013). Thus, the use of smartphone and other internet-connected devices has revolutionized the process of providing information and educational services. Smartphones are used by various classes of people; both the young and old. However, a study conducted in 11 emerging and developing countries, revealed that across all the 11 countries, smartphone use is very common among younger people below the age of 30 years. (Silver, Smith, Johnson, Jiang, Anderson & Rainie, 2023). Thus, youths make use of smartphone greatly. Among these youths are undergraduates of various universities, including those of Agricultural Education.

The undergraduate students use the phone for various purposes. According to Demirci, Akgonul and Akpinar (2015), smartphone serves as a portable device for communication, research, accessing educational information, taking notes during lectures, connecting with experts in various educational programmes, among others. These contribute features help to popularize the use of smartphones among the students. However, Agricultural Education students are particularly selected for the study because they have specialized focus on the unique practices and challenges within

agricultural education which may differ significantly from the broader body of students in the university. For instance they use smartphone for research, monitoring farm data through various applications in the phone among, others (Irby & Strong, 2013). This approach could help the researcher to gain in-depth insight into issues specific to agricultural education and advice accordingly.

Studies revealed that many students use the Smartphone excessively (Yeap, Ramayah, Halim, Ahmed & Kurmnia; 2016; Shek, Sun & Yu, 2013). Excessive use of Smartphone, according to Wigmore (2018), is known to be a situation in which someone depend on smartphone usage so much that it is hard to control or stop the urge; and a habit that is so difficult to stop despite its adverse effects. There are some indicators or signs of excessive smartphone use. Burke (2019) outlined these signs to include: restlessness, sleeplessness, anxiety, depression, and sleeping with the phone. Owolabi, Oyewole & Oke (2013) added that a lot of undergraduate students have formed the habit of over using the smartphone without minding time loss and that these students experience extreme reactions when the phone is separated from them. It is thus, is a very worrisome habit which has negative consequences to students generally. For instance, a study carried out by Yeap, et al, (2019) on the impact of internet addiction in India, revealed that smartphone addiction has increased students' absenteeism from classes, apathy to academic activities, social isolation and less time is spent on studies. In a similar study carried out by Onuka (2021), to ascertain the influence of internet use on the academic performance of students in Umuahia North LGA of Abia State, confirmed that students, including Agricultural Education students, spend so much time in social networks such as facebook, whatsapp, twitter, instragram and goggle to the point of addition. Again, studies have revealed that excessive use of smartphone is associated with depression, anxiety, emotional and cognitive challenges. (Demirci et al.,2015; Shek et al; 2013) The situation could threatened the family wellbeing as parents may suffer emotionally, socially and financially because of the attitudes of their children over excessive Smartphone use (Ezema, 2017).In the light of the foregoing discussions, there is need for universities in Abia State to regulate the use of smartphone on campuses to reduce its social-economic implications.

Regulating excessive use of smartphone is the activities of controlling the use of the device based on regulations; where they exist. These regulations are official instructions or rules that states how smartphones will be used in the universities. In the cause of the study, the researcher found that the universities under study do not have regulations guiding the use of smartphones. Based on this, there is therefore, a need to devise appropriate strategies for regulating smartphone use among Agricultural Education students in the area.

Strategy is known to be a method or way of achieving an aim. According to Onuka and Isiwu (2017), strategy is

a plan of action for actualizing a dream. In the context of this study, strategies for regulating excessive use of Smartphone among Agricultural Education Students in Universities in Abia State, are methods, ideas and ways that is intended to address the challenges of excessive use of smartphone. The university management, parents, students themselves and families can help to regulate smartphone. For instance, students can control excessive use of Smartphone by limiting phone use to only academic purposes (Onuka, 2021), reducing budget for recharge cards, or going for counseling when addicted by phone use, (Onuka, 2021; Ayamba, 2013). The university management and lecturers could: organize seminar/workshop for students on smartphone addiction, work with internet providers to regulate excessive use of smartphone, organize inter-hostel games to divert the attention of students from social network sites (Olowookere, 2018) as well as work with students' leaders to establish rules and standard on the use of internet (Ainin, 2012), among others. Families could set clear guidelines on the use of the device at homes, specify age their children will begin to use the phone, encourage open discussion with children on uses of smartphone, and set time when to use the phone at home (Onuka, 2021). In their views, Bialobrzeska & Cohen (2015) added that families can reduce budget on recharge cards, sanction children and wards for wrongful use of the smartphone and among others. These strategies could go a long way to reduce excessive use of the phone, even in the university.

There is hardly, any data on excessive use of smartphone in the area of the study. Therefore, a study on this subject is paramount to the understanding of regulation of smartphone use in the area of the study. It may enhance a greater understanding of Smartphone use in education generally and in Agricultural Education in particular. It is in light of this background that the research was carried to determine strategies for regulating excessive use of smartphone among Agricultural Education Students in Universities in Abia State. This is the gap the study has filled.

Purpose of the study
The study evolved strategies for regulating excessive use of smartphone among Agricultural Education (Agric Ed) students in universities in Abia State, Nigeria. Specially, the study determined:
1. perceived consequences of excessive use of smartphone by Agric Ed students in universities in Abia State,
2. student-related strategies for reducing excessive utilization of smartphone by Agric Ed students in universities in Abia State,
3. university-related strategies for reducing excessive use of smartphone by Agric Ed students in universities in Abia State.
4. family- related strategies for reducing excessive utilization of smartphone by Agric Ed in universities in Abia State.

Hypotheses

There is no significant difference between the mean responses of lecturers and students on:

H_{01}: perceived consequences of excessive use of smartphone among Agric Ed students in universities in Abia State.

H_{02}: student-related strategies for reducing excessive utilization of Smartphone, among Agric Ed students in universities in Abia State.

H_{03}: university-related strategies for reducing excessive utilization of smartphone among Agric Ed students in universities in Abia State.

H_{04}: family-related strategies for reducing excessive utilization of smartphone, among Agric Ed students in universities in Abia State.

Methodology

Design of the study: The study adopted descriptive survey research design.

Area of the study: The study was conducted in universities in Abia State, Nigeria. Abia State is located in South Eastern Nigeria. The state was chosen for the study because of evidence of excessive use of smartphone among Agricultural Education students in universities in the state (Onuka, 2021). There are two universities that offer Agricultural Education programme in Abia State. These are Michael Okpara University of Agriculture, Umudike (MOUAU) and Abia State University, Umuahia campus (ABSU).

Population of the study: The population of the study was 93 respondents, consisting of all the lecturers of Agricultural Education and penultimate students from the universities who offer Agricultural Education programme. Details of the population are as follows: MOUAU 10 lecturers and five lecturers from ABSU as well as 63 students from MOUAU and 15 students from ABSU (Records from Departmental offices of both universities at Umudike and Umuahia, 2021). The two groups of respondents are major stakeholders in the universities whose opinions are necessary in the study; the duo is selected in order to provide more targeted insight to the study because of their specific expertise and specialized knowledge in Agricultural Education. By focusing on them the researcher could develop interventions and recommendations on issues that are more likely to meet the specific needs of agricultural education students, which may differ significantly, from the broader student body.

Sample and Sampling Techniques: The entire population of 93 was involved in the study. There was no sampling as the number was small and can be managed by the researcher.

Instrument for data collection: Questionnaire was used for data collection. It consists of sections which focused on personal data of the respondents and specific purposes of the study. The response scale for each questionnaire items are Strongly Agree (SA), Agree (A), Undecided (UN), Disagree (D) and Strongly Disagree (SD) with corresponding values 5, 4, 3,

2, and 1. The questionnaire was validated by three university experts in Agricultural Education and Computer Education. Cronbach Alpha method was used to determine the reliability of the instrument. A coefficient of 0.79 was obtained for the questionnaire. This was adjudged to be reliable.

Method of Data Collection: A total of 93 copies of the questionnaire were administered on 93 respondents by hand with the help of three research assistants. All the 93 copies were properly completed and retrieved.

Method of Data Analysis: Data collected were analyzed using mean to answer the research questions, while t-test was used to test the null hypotheses at 0.05 level of significance. In deciding the cut-off point, any items in research questions 1, 2, 3 and 4, a mean of 3.00 was set as benchmark for decision making. Any item whose mean is greater than or equal to 3.00 was interpreted as "Agree" while the mean below 3.00 was regarded as "Disagree". On the null hypotheses tested, the hypothesis of no significance difference was accepted when p-value was equal or greater than the alpha value of 0.05, but rejected where p-value was less than the alpha value of 0,05.

RESULTS

Table1: Mean Responses and t-test Results on Perceived Consequences of Excessive Use of Smartphone by Agricultural Education (Agric Ed) Students in Universities in Abia State, Nigeria (N=93).

SN	Consequences of excessive use of Smartphone	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	$\overline{X}_g$	t-	Remarks
	Excessive use of smart phone could:							
1	reduces the academic performance of Agric Ed students.	4.10	0.30	4.21	0.17	4.16	0.17	Agree/NS
2	reduces students interest in reading.	4.12	0.74	4.60	0.25	4.36	0.25	Agree/NS
3	increase students' urge to come late for lectures.	3.11	0.24	3.70	3.70	3.40	0.42	Agree/NS
4	cause students to often use their school fees for air time.	3.61	0.31	3.20	0.31	3.40	0.31	Agree/NS
5	may reduce students' interest in school activities.	3.32	0.81	3.22	0.12	3.27	0.12	Agree/NS
6	make Agric Ed students to use their phones even while working in the school farm.	3.44	0.65	3.22	0.63	3.33	0.52	Agree/NS
7	leads to a decline in the study habit of Agric Ed students.	3.77	0.53	3.52	0.64	3.64	0.72	Agree/NS
8	make students to give priority to watching games instead of their class work.	2.72	0.73	3.32	0.51	3.02	0.56	Agree/NS

$\overline{X}_1$= Mean of lecturers; SD_1= standard deviation of lecturers; $\overline{X}_2$= Mean of students; SD_2 = Standard deviation of students; $\overline{X}_g$ = Grand means of lecturers and students; t= t-Value

Table 1 reveals that all the eight items obtained mean scores that are above the cut-off point, X ≥ 3.00.This means that the eight items are all perceived consequences of excessive use of smartphone among Agricultural Education students in universities in Abia State. The Table also reveals that all the eight items had p-value that ranged 0.12 to 0.72 which were greater than the alpha-value of 0.05. This means that there was no significant difference in the mean responses of lecturers and students of Agricultural Education for each of the eight consequences. Therefore, the null hypothesis of no significant difference for the two groups of respondents was accepted on the eight items at 0.05 level of significance.

Table 2: Mean Responses and t-test Results of Lecturers and Students on Student-Related Strategies for Reducing Excessive Use of Smartphone among Agricultural Education (Agric Ed) Students in universities in Abia State (N=93).

SN	Student-related strategies for Reducing Smartphone use	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	$\overline{X}_g$	t	Remarks
	Agricultural Education students should:							Agree/NS
1	restrict smartphone use mainly to academic activities	3.64	0.48	3.55	0.72	3.60	0.51	Agree/NS
2	organize group discussions among themselves on how to use smartphone.	3.78	0.60	3.81	0.53	3.79	0.66	Agree/NS
3	read books to learn more about smartphone addiction and control.	3.72	0.65	3.70	0.50	7.71	0.73	Agree/NS
4	control excessive use of smartphone by the use of role play.	4.21	0.50	4.65	0.48	4.43	0.39	Agree/NS
5	regulate use of smartphones by attending seminars to know the right way to use them.	3.22	0.64	3.40	0.50	3.31	0.45	Agree/NS
6	set time limits to regulate the rate of use of the phone.	4.15	0.52	3.98	0.51	4.07	0.53	Agree/NS
7	not recharge the phone always to avoid the temptation of addiction.	3.41	0.57	3.60	0.61	3.50	0.47	Agree/NS
8	seek counseling over addiction to smartphone use.	3.31	0.54	3.50	0.51	3.40	0.27	Agree/NS

$\overline{X}_1$ =Mean of lecturers; SD_1= standard deviation of lecturers; $\overline{X}_2$= Mean of students; SD_2 =Standard deviation of students; $\overline{X}_g$ =Grand means of lecturers and students; t= t-Value

Table 2 shows that all the eight items obtained mean scores that are above the cut-off point, X ≥ 3.00.This means that the eight items are all student-related strategies for reducing excessive use of Smartphone among Agricultural Education students in universities in Abia State. The Table also reveals that all the eight items had p-value that ranged 0.27 to 0.73 which

were greater than the alpha-value of 0.05. This means that there was no significant difference in the mean responses of lecturers and students of Agricultural Education for each of the eight student-related strategies.

Therefore, the null hypothesis of no significant difference for the two groups of respondents was accepted on the eight items at 0.05 level of significance.

Table 3: Mean Responses and t-test Results of Lecturers and Students on University-Related Strategies for Reducing Excessive Utilization of Smartphone by Agricultural Education (Agric Ed) Students in Universities in Abia State, Nigeria (93).

SN	University-related strategies for reducing excessive Smartphone use	$\overline{X}_1$	SD₁	$\overline{X}_2$	SD₂	$\overline{X}_g$	t	Remarks
	The university management should:							
1	organize seminar/workshop for Agricultural Education students on smart phone addiction:	3.89	0.40	3.99	0.45	3.94	0.34	Agree/NS
2	use orientation programmes of fresh students to create awareness on smart phone addiction.	3.56	0.54	3.30	0.50	3.43	0.75	Agree/NS
3	direct academic advisers to closely monitor their supervisees to detect features of addictive behaviours among them.	3.13	0.60	3.28	0.42	3.21	0.42	Agree/NS
4	work with student union leaders to establish rules and standard on smartphone usage.	3.21	0.51	3.50	0.50	3.25	0.41	Agree/NS
5	work with internet service providers to regulate the use of internet among Agricultural Education students.	3.41	0.74	3.60	0.51	3.50	0.32	Agree/NS
6	tell students the dangers of smartphone addiction rather than hate them for their addictive behaviours.	4.22	0.52	3.80	0.48	4.01	0.52	Agree/NS
7	organize inter- hostel games to divert the attention of Agricultural Education students from social networks sites.	3.77	0.43	3.67	0.64	3.72	0.43	Agree/NS
8	forbid negligence arising from smart phone addiction among students coming late to classes or school farm .	3.65	0.64	3.94	0.61	3.79	0.51	Agree/NS
9	specify time when servers	4.12	0.07	3.89	0.66	4.01	0.65	Agree/NS

should be on and off.

$\overline{X}_1$=Mean of lecturers; SD_1= standard deviation of lecturers; $\overline{X}_2$ = Mean of students; SD_2 = Standard deviation of students; $\overline{X}_g$ = Grand means of lecturers and students; t= t-Value

Table 3 shows that all the nine items obtained mean scores that are above the cut-off point, X ≥ 3.00.This means that the nine items are all university-related strategies for reducing excessive use of smartphone among Agricultural Education students in universities in Abia State. The Table also reveals that all the nine items had p-value that ranged 0.34 to 0.75 which were greater than the alpha-value of 0.05. This means that there was no significant difference in the mean responses of lecturers and students of Agricultural Education for each of the nine university-related strategies for reducing excessive utilization of smartphone. Therefore, the null hypothesis of no significant difference for the two groups of respondents was accepted on the nine items at 0.05 level of significance.

Table 4: **Mean Responses and t-test Results of Lecturers and Students on Family-related Strategies for Reducing Excessive Utilization of Smartphone among Agricultural Education (Agric Ed) Students in Universities in Abia State, Nigeria (93).**

SN	Family-related strategies for reducing excessive smartphone use	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	$\overline{X}_g$	t	Remarks
	Parents should:							Agree/NS
1	show good examples of how to use smartphone.	3.56	0.56	4.01	0.67	3.78	0.68	
2	set clear guidelines on the use of Smartphone.	4.12	0.44	3.76	0.54	3.94	0.65	Agree/NS
3	specify the age when children will begin to use Smartphone.	4.01	0.34	4.31	0.26	3.84	0.53	Agree/NS
4	reduce budget on recharge cards.	3.65	0.70	3.66	0.64	3.65	0.70	Agree/NS
5	monitor their children's emotions to guard against excessive smartphone use.	2.83	0.77	3.32	0.67	3.07	0.71	Agree/NS
6	tell children the dangers of excessive phone use rather than hate them.	4.02	0.41	3.88	0.56	3.95	0.46	Agree/NS
7	organize games at home to divert the attention of their children from social networks sites.	3.75	0.54	4.01	0.44	3.88	0.68	Agree/NS
8	ensure that children obey family guidelines on the use of Smartphone.	4.22	0.45	4.44	0.36	4.33	0.73	Agree/NS
9	discipline children when they compromise guidelines on phone uses.	3.88	0.48	4.55	0,33	4.22	0.45	Agree/NS

$\overline{X}_1$=Mean of lecturers; SD_1= standard deviation of lecturers; $\overline{X}_2$ = Mean of students; SD_2 =Standard deviation of students; $\overline{X}_g$ = Grand means of lecturers and students; t= t-Value

Table 4 reveals that all the nine items obtained mean scores that are above the cut-off point, X ≥ 3.00.This means that the nine items are all family-related strategies for reducing excessive use of Smartphone among Agricultural Education students in universities in Abia State. The Table also reveals that all the nine items had p-value that ranged 0.45 to 0.73 which were greater than the alpha-value of 0.05. This means that there was no significant difference in the mean responses of lecturers and students of Agricultural Education for each of the nine family related strategies. Therefore, the null hypothesis of no significant difference for the two groups of respondents was accepted on the nine items at 0.05 level of significance.

Discussion of Findings
The result in Table 1 reveals perceived consequences of excessive use of smartphone by Agricultural Education students in universities in Abia State, Nigeria. They include: excessive use of smartphone reduces the academic performance of Agricultural Education students, reduce students interests in reading, increase students' urge to come late for lectures, cause students to often use their school fees for air-time, may reduce students' interests in school activities and make Agricultural Education students to use their phones even while working in the school farm. These findings are in consonant with the submissions of Yeap (2019) who said that students derive much pleasure accessing information using the smartphone excessively. The

findings are also in line with the comments of Burke (2019), who named restlessness, depression, anxiety and poor academic performance as great consequences of Smartphone addiction on the academic performance of students.

The result in Table 2 discloses student-related strategies for reducing excessive use of smartphone among Agricultural Education students in universities in Abia State, Nigeria. They are Agricultural Education students may reduce smart phone addiction by limiting smart phone use mainly to academic activities, students can organize discussions classes among themselves on the uses of smart phone, Agricultural education students may read books to know more about smart phone addiction and control, Agricultural Education students can reduce the excessive use of smartphone through role play and five others. These findings are in consonant with the findings of Onuka (2021) and views of Ayamba (2013) that students can reduce excessive use of smartphone by limiting the use of smartphone to academic activities.

Table 3 reveals university-related strategies for reducing excessive use of smartphone among Agricultural Education students. They include among others, university management could organize seminars/workshops for Agricultural Education students on smartphone use, use orientation programme for fresh students to create awareness on consequences of smartphone addiction, direct academic advisers to closely monitor their supervisees to detect features of

addictive behaviours among them, work with student union leaders to establish standard on smartphone usage, work with internet providers to regulate the use of internet among Agricultural Education students, tell students the dangers of smartphone addiction rather than hate them for their addictive behaviours and organize inter-hostel games to divert the attention of Agricultural Education students from social networks sites. These findings support the views of Olowookere (2018) who opined that universities can control excessive use of smartphone by organizing seminars on smartphone addiction control.. The findings also support the views of Ainin (2012) that universities should work with student leaders to establish rules and standards on the use of internet by young adults.

Table 4 shows family-related strategies for reducing excessive utilization of smartphone among Agricultural Education students in universities in Abia State. They are parents should show: good examples of how to use smartphone, set clear guidelines on the use of smartphone, specify when children will begin to use smartphone, reduce budget on recharge cards, monitor their children's emotions to guard against excessive smartphone use, tell children the dangers of excessive phone use rather than hate them, organize games at home to divert the attention of their children from social networks sites and ensure that children obey guidelines on the use of smartphone. These findings agree with Onuka (2021) that families could set clear guidelines on the use of

phone. The results also support the views of Bialobrzeska & Cohen (2015) that families can reduce budget on recharge cards, sanction children and wards for wrongful use of the smartphone to reduce excessive use of smartphone.

It was also found out that there was no significant difference between the mean responses of lecturers and students on perceived consequences of excessive use of smartphone and strategies adopted by students, universities, and families to reducing excessive smartphone use among Agricultural Education students in Abia State, Nigeria.

Conclusion
The use of smartphone in education has revolutionized the teaching and learning of Agricultural Education. Smartphone usage is increasingly becoming acceptable as a method of instructional delivery in universities the world over. However, it is suspected that many students of Agricultural Education in universities in Abia state are using the smartphone excessively and this could result to negative consequences to their academic performance. The study was therefore carried out to address the issue. The study determined perceived consequences of excessive use of smartphone, as well as strategies adopted by student, university, and families for reducing excessive utilization of smartphone in universities in Abia State.

The study had therefore provided information on excessive use of smartphone among Agricultural

Education students in universities in Abia State which was not available before the present study. It has therefore contributed to learning and filled the gap created by the absence of this information on the subject that was not available before the present study.

Recommendations

Based on the findings of the study, the following recommendations were made by the researcher:

1. Perceived consequences of excessive use of smartphone among Agricultural Education students should be avoided by the collaborative efforts of the university management, students and parents.
2. Agricultural Education students should organize seminar/workshop on the use of Smartphone as part of the students' week activities.
3. The university management should package the findings of the study into booklets and made available to students as reference materials and for counseling programmes.
4. Universities should organize recreational activities such as inter-hostel football competition to take the minds of students away from social media sites.
5. Parents should set guidelines on the use of smartphone in their family to control the use of this device among members of the family.

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