



NOMOPHOBIA AND SMARTPHONE ADDICTION AS CORRELATES OF SENIOR SCHOOL STUDENTS' MATHEMATICS ANXIETY

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Abstract: Technology has revolutionised everyday existence. Information and Communication Technology (ICT) is essential to society, employment, and education. Improved microelectronics has facilitated the proliferation of inexpensive portable devices such as smartphones. This study, therefore, investigated whether senior secondary school students' nomophobia and smartphone addiction are linked to math anxiety. Two research hypotheses were tested and the study was guided by social cognitive theory. This study employed a descriptive survey research methodology and primary data were collected from 397 students in Ikorodu, Lagos, Nigeria with the use of the Nomophobia Questionnaire (NMP-Q, $\alpha=0.89$), the Smartphone Addiction Scale Short Version (SAS-SV, $\alpha=0.82$), and the Mathematics Anxiety Scale (MAS, $\alpha=0.81$) developed by Yildirim and Correia (2015), Kwon et al. (2013), and Ablian and Parangat (2022) respectively. The data gathered were subjected to analysis using frequency counts, Pearson correlation, and regression analysis at 0.05 significance level. This analysis was conducted using SPSS software, specifically version 23.0. The research revealed a significant association between nomophobia and smartphone addiction among the students. Additionally, the severity of nomophobia and smartphone addiction emerged as significant predictors of mathematics anxiety among high schools in Lagos. Consequently, this investigation proposes that educational authorities in Lagos State should consider implementing a ban on mobile phone usage within secondary schools as a means to mitigate these behavioural addictions among adolescents. Additionally, stakeholders within the education sector, including parents, can contribute to the prevention of these addictions by advising students about the perils of smartphone addiction, fostering ethical social interactions that cultivate trust in the family unit, and imposing restrictions on their children's smartphone usage and associated expenses.

Key words: Mathematics anxiety, nomophobia, smartphone addiction, secondary school

1. Introduction

Technology has transformed daily life. Society, work, and education depend on ICT. Improved microelectronics have helped low-cost portable gadgets like cellphones proliferate (Oulasvirta, Rattenbury, Ma, & Raita, 2012). Internet access makes smartphones useful for many purposes. Smartphones promote 3D imaging, cybernetic authenticity, and teaching. This innovative strategy lets students with enhanced learning skills proactively interact with internet resources and display exceptional educational behaviours. Smartphones increase collaborative, private, and flexible learning for students and teachers (Akkoyunlu, 2018; Crompton, et al., 2016). Mobile gadgets outnumber people in some civilizations (Pavithra et al., 2015), and more adolescents utilise the web on portable devices. Cellphones are luxury items in tech-savvy nations, and youth adopt new technologies swiftly (Argumosa-Villar et al., 2017). The Premium Times Newspaper (2020) stated that Nigeria's internet users in December 2018 rose 3% to 111,632,516 from 108,457,051 in November 2018. Mobile use soared; 140 million users in Nigeria by 2025, 25–40 million Nigerians use mobile phones, according to estimates (Awofala, 2020).

Smartphone-savvy seniors and youth spread social networks online. Despite cellphones' benefits, youth are more vulnerable to technology enslavement as they learn to utilise them (Dongre, Inamdar, & Gattani, 2017). Nomophobia from smartphone addiction can cripple students. Nomophobia is a fear of being without a phone. A 2008 UK Postal Service study on smartphone users' anxieties coined

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"nomophobia" (SecurEnvoy, 2012). Nomophobia affected 53% of smartphone owners, with men being more susceptible (Awofala, 2020). Overtly, nomophobia is the fear of being incommunicable, missing the connection handsets provide, being unable to obtain information through smartphones, and leaving the comfort smartphones bring. Like smartphones, nomophobia is rising, especially among young people (Adnan & Gezgin, 2016; Broughton, 2015; Kaur & Sharma, 2015; Pavithra et al., 2015). Nomophobia, a compulsive cellphone obsession, harms mental and physical health. Smartphone addiction causes nomophobia and anxiety when network coverage is lost. "Ringxiety" and "phantom vibration disorder" are signs (Bragazzi & Del Puente, 2014). Nomophobia demoralises people from focusing on regular duties (Dixit et al., 2010).

Conversely, mathematics education academics study the elements needed to learn math and improve thinking. These researches are important, but there have also been studies on pupils' math education issues. Math is hard enough, but emotional problems can make it harder. Math causes anxiety. Dreger and Aiken (1957 quoted Erdem, 2017) first described math anxiety. It was "the prevalence of an emotional responses syndrome to mathematics and arithmetic" (Baloğlu & Koçak, 2006). Another study defined math anxiety as "an illogical emotion of fear, humiliation, fury, aversion, failure, and worry, which are apparent, and which limit learning, solution, and performance concerning arithmetic" (Bekdemir, 2010, p. 312). Based on this premise, this study investigates whether senior secondary school students' nomophobia is linked to math anxiety and smartphone addiction. Hence, the hypotheses below are tested:

H₀₁: No significant association exists between nomophobia and smartphone addiction among high school students in Lagos State

H₀₂: Nomophobia and Smartphone addiction do not significantly predict mathematics anxiety among high school students in Lagos

2. Literature Review

2. 1. Theoretical Framework

This study employs Bandura's social cognitive theory (SCT, 1982) as a framework to investigate the associations among nomophobia, smartphone addiction, and math anxiety. The SCT suggests that individual variables, external conditions, and behaviour can explain human behaviour, including anxiety. Jesse (2015) found that students used mobile social networking apps most (e.g., WhatsApp, Twitter, Pinterest, Instagram, and Facebook). Nomophobia improved with this level of social media activity. Daily smartphone use may increase the anxiety of being alone. Thus, this study also examines whether secondary school students' nomophobia is linked to smartphone addiction and math fear. In summary, the SCT emphasises that when a student exhibits a significant emotional attachment to a mobile, concerns may arise regarding the lack of smartphones and the resulting detachment from them. Consequently, the student is likely to feel distress due to the inability to access new information, engage in social interactions with relatives and friends, efficiently complete tasks, and establish a presence on the internet. In the contemporary era characterised by technological advancements, those who engage with cellphones are more susceptible to experiencing nomophobia, a prevalent fear prevalent in the current age.

2. 2. Mathematics Anxiety: Definitions, Effects, Causes and Symptoms

Educational academics have long studied math anxiety in students (Awofala & Odogwu, 2017; Hembree, 1990). Yakubu (2018) stated that math would always impact humanity, even if the desire for solutions is unquestionable every day, everywhere, and always. He emphasised that practically everyone uses math, even housekeepers. Math, the father of all disciplines/subjects, has endured many defeats and challenges. Math anxiety is a perturbing element that hinders students' achievement and promotes disaffection in mathematics learning (Awofala, 2017; Awofala & Awolola, 2011; Awofala et al., 2024; Sopekan & Awofala, 2019). Outside of school, many associate math with despair and heartache and mathematical discomfort causes these issues (Awofala & Odogwu, 2017; Awofala, 2019; Awofala & Akinoso, 2017; Bekdemir, 2010; Hembree, 1990; Suinn, 2010; Tobias, 2006).

Tobias (2006) defines mathematics anxiety as worry and dread that interfere with managing figures and the ability to solve mathematics is applicable to a diverse array of everyday and scholarly challenges and situations. Mathematics anxiety is a psychological condition that induces fear and apprehension in students when confronted with mathematical symbols and concepts. This emotional response has a detrimental impact on their ability to do well in mathematics (Awofala et al., 2024; Hembree, 1990; Suinn, 2010). Students' failure in math had already led to a misguided illusion about learning and comprehending math, resulting in a significant effect on their self-esteem in the subject and made math a terrible experience for so many students and their most difficult subject in the classroom (Awofala, 2017; Sopekan & Awofala, 2019). Why math anxiety? Is it educators' or parents'? Maybe the learning environment and settings matter more? These questions were answered in part by Polacco, Zsoldos-Marchis and Dekel (2023). Fear and expecting the worse cause anxiety almost constantly (Awofala, 2017; Sopekan & Awofala, 2019). Fear is the root of all anxiety, and while some dread is necessary for human survival, it becomes an illness when it becomes exhausting and without objective.

Two types of symptoms of mathematics anxiety can be identified physical symptoms and psychological symptoms. Physical symptoms of mathematics anxiety may include excessive perspiration, strong heartbeat, cold sweats, dry mouth, shakiness, headache, shortness of breath and feeling of faint (Awofala et al., 2024; Hembree, 1990; Polacco et al., 2023; Sheffield & Hunt, 2006; Suinn, 2010; Tobias, 1980, 1981, 2006). Psychological symptoms of mathematics anxiety may include desire to flee the situation involving math, fear, worry and apprehension, panic, and negative self-talk (Awofala et al., 2024; Hembree, 1990; Polacco et al., 2023; Sheffield & Hunt, 2006; Suinn, 2010; Tobias, 1980, 1981, 2006).

2. 3. Nomophobia

Nomophobia, also known as "no mobile phobia," refers to the psychological condition characterised by an intense fear experienced by individuals when they are separated from their smartphones (Awofala, 2020; Awofala & Esealuka, 2021). Nomophobic people, especially children, feel nervous when they can't converse or access information because they forgot their phone, ran out of power, or were out of radar range. Over the course of time, this circumstance prompts individuals to frequently monitor their mobile devices, even when the device is in close proximity (Adnan & Gezgin, 2016; Algül, 2014; Yildirim, et al., 2016). Clinical psychology describes nomophobia as an irrational fear of being unable to use a smartphone. Though not officially approved by the profession (Bragazzi & Del Puente, 2014), it seems to be the acceptable definition (King et al., 2013; Yildirim & Correia, 2015). Anxiety responses as fear, uneasiness, breathing trouble, stomach cramps, and others affect nomophobes' daily focus (Dixit et al., 2010; Thomée et al., 2011). More research shows that fears hurt kids' academic performance (Erdem, et al., 2016).

2. 4. Smartphone Addiction

Smartphone addiction occurs when a person cannot control their use of the gadget despite its negative effects (Awofala, 2020; Awofala & Esealuka, 2021). Smartphone addiction distracts people. Smartphone addiction shows dependence on digital technology that can precipitate distraction (Awofala et al., 2020; Mahajan, 2020). Smartphone addictions are no worse than heroin addictions. Drug abusers are naturally addicted. Needles are just one delivery mechanism. Smartphones' amusement, knowledge, and social connections make people dependent on them. People will go to extremes to connect. Facebook, texting, Twitter, WhatsApp, and many more virtual communities exhibit this human behaviour. Smartphones enable mobile, rapid information, engagement, and networking (Emanuel et al., 2015).

2. 5. Nomophobia and Smartphone Addiction

Research shows that smartphone use increases nomophobia (Gezgin et al., 2017; Lee, et al., 2014; Pavithra et al., 2015; Singh et al., 2013). Nomophobia is widespread in many countries and cultures (King et al., 2013; Tavolacci, et al., 2015). Nomophobia is spreading alarmingly, especially among younger people, according to studies from many countries and sample sizes (Cheever et al., 2014; Kaur & Sharma, 2015; King et al., 2013; Tavolacci et al., 2015).

Nomophobia is linked to socioeconomic status and smartphone use, according to Turkish and international research. Gezgin et al. (2017) show that smartphone use is a major cause of nomophobia. Thus, the relationship between mobile phones use and diseases like dread, stress, and nomophobia is significant in the absence of a smartphone. Social platforms, networking, video, games, amusement, and streaming are the most prevalent ways adolescents use cellphones (Anshari et al., 2016). The utilisation of social media and messaging applications for communication purposes is more prevalent among younger individuals (Anshari et al., 2016). This is especially responsible for social networking services (SNS) dramatic rise in prominence and adolescent use. SNS may have helped spread SNS smartphone app use along with web access (Awofala et al., 2021; Salehan & Negahban, 2013). These programmes make social media quicker and simpler. Younger individuals also use phones to browse the internet. It should be noted that excessive internet time may make this pastime more appealing, and this may result into problematic internet use addiction (Awofala, Akinoso & Adebayo, 2022).

Internet use has increased due to the growing popularity of smartphones and their ease of access. Smartphones need a constant Internet connection. Users can utilise a number of mobile apps to get information, connect to social networks, and share files. Anshari et al. (2016) found that elderly persons typically engage with the internet for a duration of less than six hours a day, but younger individuals tend to maintain a nearly continuous online presence, spanning the entirety of a 24-hour period. The prevalence of phone addiction and nomophobia is high among the youth population. (Kwon et al., 2013). Furthermore, the addictive nature of smartphones can be attributed to various factors such as the availability of mobile Internet, the portability of these devices, the wide choice of applications they offer, and their user-friendly interface that may lead to excessive usage (Oulasvirta, et al., 2012; van Deursen et al., 2015).

2. 6. The Effect of Nomophobia and Smartphone Addiction on Mathematics Anxiety

The study conducted by Awofala (2020) investigated the relationship between nomophobia and smartphone addiction amongst pre-service mathematics instructors in Nigeria. The study employed a sample of 300 pre-service mathematics instructors, selected by a random sampling method from the Science and Technology Education Department at the University of Lagos, Akoka. With the help of the statistical tools including frequency counts, percentages, means, standard deviations, correlation coefficient, and regression analysis, the study was able to provide answers to all its four research questions that were posed. According to the findings, most of the pre-service mathematics students experience nomophobia and were addicted to their smartphones. Nomophobia was a strong predictor of mobile phone addiction among the participants and a direct link existed between smartphone addiction and nomophobia. In spite of this, the findings highlight the need for further investigation into nomophobia as a potential determinant of smartphone addiction among young people.

Numerous academics have taken a variety of approaches in their investigations of nomophobia, smartphone addiction, and mathematics anxiety. For example, Park et al. (2014) performed research in South Korea using 1,420 teenagers to examine the discrepancies between their Internet addiction and their cellphone addiction. They concluded that the factors responsible for mobile phone and Internet dependencies are closely linked. Choi et al. (2015) conducted a study on the hazards of smartphone addiction using South Korean university students. They discovered that a significant association existed between internet addiction and smartphones. A study that was conducted in Israel by Ben-Yehuda et al. (2016) on a total of forty university students found a positive link between the use of smartphones and addiction to the internet. The study also showed that this addiction was exacerbated by the use of the internet. However, only one study had been carried out on the connections among nomophobia, smartphone addiction and mathematics anxiety (Awofala & Esealuka, 2021). Therefore, the present study investigated whether high school students' smartphone addiction and nomophobia are linked to math anxiety.

3. Methodology

3.1. Research Design

This study employed a descriptive survey research methodology. According to Nageswara (2018), this methodology is employed in quantitative research to gather data while maintaining the integrity of the

natural world, without introducing any modifications or alterations. This is achieved with the help of surveys. This is accomplished by gathering data from a segment of the population under study that is believed to be representative of the entire group.

3.2. Participants

This study is limited to Ikorodu, and the population consists of students from Ikorodu's 28 public high schools in Lagos State, Nigeria. The demographic is limited to grades 10 and 11 because grade 12 students are completing their final exams and the researchers do not wish to disrupt their academic endeavors. Consequently, the sampling frame for this study consisted of 4,609 boys and 4,691 girls in grade 10, and 3,378 boys and 3,774 girls in grade 11 (Ministry of Education, 2018). Hence, the

sampling frame is 16,451 students from Ikorodu. Using the Yamane (1967) formula; $n = \frac{N}{1+N(e)^2}$, the sample size is 391 students. Given a 10% estimated non-response rate, 430 students were randomly selected.

Table 1. *Participants' Demographics*

Variables	N	%
Sex		
Male	210	52.9
Female	187	47.1
Total	397	100.0
Age		
Below 13 years	114	28.7
13-16 years	202	51.0
Above 16 years	81	20.3
Total	397	100.0
Class		
SS 1	138	34.8
SS 2	259	65.2
Total	397	100.0
Department		
Arts	108	27.2
Commercial	147	37.0
Science	142	35.8
Total	397	100.0

Table 1 presents the participants' demographics. Concerning their sexes, the table reveals that most (52.9%) of them were males, and the remaining 47.1% of them were females. This indicates that the two sexes took part in this study's survey. In relation to their ages, the data presented in the table reveals that a significant proportion (51.0%) of the students fell within the 13–16-year age range. Additionally, 28.7% of the participants were below 13 years old, while the remaining 20.3% were above 16 years of age. More so, the majority (65.2%) of the participants were in grade 11 and the remaining 34.8% of them were grade 10 students. This indicates that only grades 10 and 11 students partook in the survey. And concerning their departments, 27.2% of the participants were in the Arts Department, 37.0% of them were in the Commercial Department, and the remaining 35.8% of them were in the Science Department. This shows that the study captured all the three departments in the senior secondary schools.

3.3. Instruments

Three valid and reliable instruments were used for data collection in this study. They included: Nomophobia Questionnaire (NMP-Q), Smartphone Addiction Scale-Short Version (SAS-SV), and Mathematics Anxiety Scale (MAS) developed by Yildirim and Correia (2015), Kwon et al. (2013), and Ablan and Parangat (2022) respectively were adopted to collect primary data for this study. The NMP-Q contained 20 questions, each scored on a five-point Likert scale. The SAS-SV contained 10 questions, each scored on a five-point Likert scale. The MAS contained 30 items, each score on a five-

point Likert scale. The instruments yielded reliability values of 0.89, 0.82, and 0.81, for NMP-Q, SAS-SV and MAS respectively.

3.4. Procedure for Data Collection

Permissions were sought from the principals of the schools sampled for the study. All students filled in and returned the informed consent forms. Students were not coerced as they had the opportunity of pulling out at any stage of the data collection process. The three instruments namely, NMP-Q, SAS-SV and MAS were administered to the sample with the help of three research assistants. 430 students were sampled and only 397 students submitted correctly filled questionnaires used for the study.

3.5. Data Analysis

The obtained data were analysed with frequency counts, correlation, and multiple regression analyses, at 0.05 significance level, with SPSS (23.0).

4. Results

4.1. Test of Hypotheses

The two hypotheses earlier stated for this study are tested below.

4.1.1. Hypothesis One: There is no significant relationship between nomophobia and smartphone addiction among senior secondary school students in Lagos State

Table 2. Correlation statistics between nomophobia and smartphone addiction

Variables	Mean	STD	N	r	p-val.	Remark
Nomophobia	3.35	.879				
Smartphone Addiction	2.57	.609	397	.502	.000	Significant

According to the findings presented in Table 2, the correlation coefficient (r) is calculated to be .502. This value suggests the presence of a positive and moderate link between nomophobia and cellphone addiction among the student population. Additionally, the p-value is reported to be .000, indicating that this association is statistically significant. This suggests that there exists a notable correlation between nomophobia and cellphone addiction among high school students in Lagos State. Consequently, the null hypothesis that was previously posited is hereby rejected, whereas its alternative hypothesis is accepted.

4.1.2. Hypothesis Two: Nomophobia and smartphone addiction do not significantly predict mathematics anxiety among senior secondary school students in Lagos State

The developed model reinforces that smartphone addiction had a higher contributory coefficient of 0.387 ($Sig. = 0.000$), while nomophobia had a lower contributory coefficient of 0.111 ($Sig. = 0.033$), which shows the contributions are both significant. Based on the obtained p-value of 0.000, which is less than the predetermined significance level of 0.01, it may be inferred that the model exhibits a statistically significant relationship with a confidence level of 99%. The primary objective of this study is to develop a model that can effectively elucidate the factors contributing to the variation in mathematics anxiety experienced by students in senior secondary school. Therefore, it can be inferred that there is a substantial relationship between nomophobia, smartphone addiction, and mathematics anxiety among senior secondary school students in Lagos State. The coefficient of determination (R^2) for the final regression model is 0.453, indicating a somewhat good association. The coefficient of determination, denoted as R-square (R^2), is seen to be 0.205. This value suggests that approximately 20.5% of the variance in mathematics anxiety can be attributed to the presence of nomophobia and smartphone addiction.

Table 3: Regression Statistics

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.504	.115		13.093	.000

Nomophobia	.068	.032	.111	2.137	.033
Smartphone Addiction	.341	.046	.387	7.450	.000
Dependent Variable: Mathematics Anxiety					
R= 0.453, R ² = 0.205, Adjusted R ² = 0.201					
F-value = 50.810 (p-value = 0.000<0.05)					

While the adjusted R² also shows that 20.1% of the variance in mathematics anxiety is explained by the model, while the remaining 79.9% of it is outside this model. The significant F-Change stood at 50.801 for the final model. A returned significant F-change (p-value of F-Change) of 0.000 < 0.01 (level of significance) which means that the model is 99% significant. Hence, it is concluded that if the levels of nomophobia and smartphone addiction among senior secondary school students are drastically reduced, mathematics anxiety among them will also be reduced meaningfully. The regression equation of the model is given as Mathematics anxiety_{predicted} = 1.504+0.068Nomophobia + 0.341Smartphone Addiction.

5. Discussion

This study found that nomophobia and smartphone addiction are strongly correlated among Lagos State senior secondary school students. This finding supports the idea that smartphone use increases nomophobia (Awofala, 2020; Awofala & Esealuka, 2021; Gezgin et al., 2017; Lee et al., 2014; Pavithra et al., 2015; Singh, et al., 2013). Nomophobia is widespread and pervasive according to studies across several countries and cultures (King et al., 2013; Tavoracci, et al., 2015). Nomophobia is spreading alarmingly, especially among younger people, according to studies from many countries and sample sizes (Cheever, et al., 2014; Kaur & Sharma, 2015; King et al., 2013; Pavithra, et al., 2015). Studies show that smartphone use is a major cause of nomophobia (Gezgin et al., 2017). Thus, the relationship between mobile phones and diseases like dread, stress, and nomophobia is significant in the absence of a smartphone. Awofala (2020) also established a direct correlation between smartphone addiction and nomophobia. There is a correlation between nomophobia and smartphone addiction because students with nomophobia are more likely to engage in behaviours associated with smartphone addiction. Students with nomophobia may use their smartphones excessively as a way to cope with their fear or anxiety of being without their devices. This can lead to addictive behaviours over time. Smartphone addiction can exacerbate nomophobia because students who are addicted to their phones are more likely to experience anxiety and distress when separated from their devices.

The present study also found that nomophobia and smartphone addiction are important predictors of mathematics anxiety among high school seniors in Lagos State. This is consistent with the argument (Thomé et al., 2011) that anxiety symptoms such as fear, nausea, trouble breathing, abdominal cramps, and other similar feelings have a negative impact on the everyday attention of persons with nomophobia (Awofala & Esealuka, 2021; Dixit et al., 2010). There are further research highlighting the negative effects phobias have on the academic achievement of children (Erdem, et al., 2016). This line of research would help to comprehend the interplay between psychological elements and digital technology use in response to mathematics anxiety and consequently achievement in mathematics among senior secondary school students. In addition, it is germane to note that senior secondary school students may vary in their experience of mobile phone use in connection with mathematics anxiety and smartphone addiction. Clearly, nomophobia is connected with the anxiety or fear of staying in the absence of a mobile phone. The experience of nomophobia by high school seniors may possibly influence their capability to engage in mathematics which may translate into mathematics anxiety when they are incapable of deploying their smartphones during mathematics-related undertakings and examinations. Smartphone addiction, noted for unrestrained and psychoneurotic smartphone utilisation, may so impede mathematics performance and indeed lead to mathematics anxiety. The addiction of high school seniors to smartphone could prevent them from spending enough time on academic activities, mathematics related activities inclusive. This could eventually lead them to experience anxiety as they struggle with mathematics-related tasks and examinations.

5.1. Conclusion

The present study has contributed to our understanding of the associations among mathematics anxiety, smartphone addiction and nomophobia in senior secondary school students in Lagos State. Clearly, there was a strong relationship between smartphone addiction and nomophobia in senior secondary school students, and that smartphone addiction and nomophobia were meaningful forecasters of math anxiety. However, these findings highlight the negative influence of mobile phone use on psychological well-being and academic performance of the students. Altogether, this study shows the need to engage in more research and adopt newer interventions in managing the adverse and debilitating impacts of mobile phone use, specifically among senior secondary school students. Conclusively, the comprehension of the multifaceted associations among mathematics anxiety, smartphone addiction and nomophobia in senior secondary school students would allow parents, policymakers and educators to join hands together in promoting good and prudent mobile phone use among young students.

5.2. Recommendations

Following the findings of this study, it is recommended that:

1. Secondary school officials in Lagos State can reduce these behavioural addictions in youngsters by forbidding mobile phone use in school. However, it is important to note that students may still experience nomophobia and smartphone addiction outside of school, and therefore, additional interventions may be necessary;
2. Schools and non-governmental organisations can extend leisure programmes and provide psychotherapy and treatment for the addiction;
3. Stakeholders within the education sector of the nation, including parents, have the potential to mitigate these addictions in the coming years through the implementation of strategies such as informing students about the perils associated with addiction to smartphones, fostering ethical social engagement that cultivates trust within the familial unit, and imposing restrictions on their children's smartphone usage and associated expenses.
4. Mathematics teachers and NGOs may design games, exercises, or team-building events that emphasise conceptual understanding and give multiple ways to find solutions to assist kids overcome math anxiety;
5. Teachers can use fun games and activities to get pupils working together. Teachers may encourage pupils to think rationally and offer feedback to promote self-learning and independence.

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