Digital Dieting Model

Mahima Tripathi

M.Ed, (Sem-4, Net-Jrf (2023,2024), Chhatrapati Shahu Ji Maharaj University, Kanpur

ABSTRACT
This research explores the effect of Digital diet model on the study habits of adolescent children. The sample consisted of 12 students from class VIII, IX, X, XI, XII of private senior secondary schools in Kanpur, Uttar Pradesh during the academic session 2023-24. The sample was selected based on age of adolescent due to the experimental nature of the study, the students were equally distributed into control and experimental group. A self developed digital diet model was implemented before and after the experiment. The experimental group has to follow digital diet model for three weeks. The intervention program was administered for three weeks and the data obtained were analyzed by applying the t test. The research findings revealed that students study habits increased significantly with the use of Digital diet model (DDM). As the healthy diet is important for a good health as same as digital diet model is supportive & considerate in enhancing students study habits.

Keywords: DDM, Adolescent, Study Habits

INTRODUCTION
As the healthy diet is important for good health and nutrition because it protects you against many chronic and non communicable diseases as same as following the dietary approach digital diet model present the way spending time away from technology and achieve good mental health. In the present scenario while we do questions what we eat?, or what we drink? On the daily basis we rarely question, what type of content we are consuming? Is it relevant? It is good for our mental health? Is it increasing attention power or decreasing? “ For a list of all the ways, technology has failed to improve the quality of life “- [Alice kahn, author of multiple sarcasm]. In this study DDM means Digital Diet Model. The digital diet model is the conscious effort to reduce the amount of time spending on Smart phones, computers and other electronics. The main goal of digital diet model is to become more mindful about technology usage and to improve mental, physical and emotional health and increases study habits. In the present scenario when almost everyone have phone, it is very difficult to break the chain of distractions while taking benefits from technology, this model presents certain steps by following those steps not only time will be saved but also it will provide good mental health.

DIGITAL DIETING MODEL
in the present era when almost everything is depend on digital devices like phone, computers, tablets, etc we can access the information from any corner of the world in one click without any extra burden but along with that the report revealed that the creativity, the study habits of the students affected significantly in the recent years due to access use of digital devices. We have recently seen the pandemic that created the great agony for the human beings, at that point during lockdown the educational institutions were compelled to depend upon ICT and digital devices, Ict and digital devices also proved
that now the world is of ICT & digital devices, but in other point of view, we can see that ICT & digital devices only enhance the cognitive abilities but the affective and psychomotor domain of the development is badly affected by ICT & digital devices. In the post pandemic era, the addiction of digital devices increases significantly specially among the students of age group of 10 to 18 years. The reports revealed that after china, India is the second largest country having 49.15 % internet users. The situation during covid, when the physical activities were restricted and students were guided and taught through phone and other digital devices, from that time the digital devices become the crucial part of student’s life. Although these devices proves beneficial to them, provide instant solutions but these solution and the habit of getting instant solution affects the creativity of the students as well as study habits. Now maximum students prefer chat gpt or other platform for getting instant solution instead of reading books, although in one hand digital devices snatched the books reading capacity of the students. NEP-2020 also suggest for the integration of ICT with the learning material but we should also give attention towards the affects of digital devices on various domain of development. The digital diet model provide the solution for the addiction of digital devices. This model is created for the adolescent students of age group 10 to 18 years. In which the students have to go through 3 weeks intervention programme in which 3 steps would be followed by the students. first step followed by second and third step. these steps are significantly differ from each other on the basis of time with digital devices. the researcher observed that after 3 weeks intervention programme there was a significant improvement in study habits of the students.

<table>
<thead>
<tr>
<th>PROBLEMS FACED BY ADOLESCENT CHILDREN DUE TO THE EXCESSIVE USE OF TECHNOLOGY.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram showing the problems faced by adolescent children due to excessive use of technology." /></td>
</tr>
</tbody>
</table>

Addiction | Emotional problem | Minimized social interaction | Depression risk |
--- | --- | --- | --- |
Cyberbullying | Increased Aggression | Sleeping quality | Health issues |
--- | --- | --- | --- |
lower grades | lower attention span |
Adolescent is the age of physical, emotional, social & behavioral changes. This age required special attention specially in the era of digital world when children have lot of information and content within a click, during changes in this age group, digital devices on one hand increases the possibilities for accessing knowledge & skills but on another hand they increases dependency on digital devices. Children specially in the age group of 10 to 18 years if guided carefully, they will do better in the future.

PICTORIAL ELABORATION OF DIGITAL DIET MODEL

STEPS:
1. **1st Week** – Use of Digital Devices for 2 Hours
2. **2nd Week** – Use of Digital Devices for 1 Hour
3. **3rd Week** – No Use of Digital Devices

STUDY HABITS: In this study, STUDY HABITS means buying out a dedicated scheduled and uninterrupted time to apply one’s self to the task of learning (N.A. NADEEM, et al) . Study habits tell a person that how much he will learn and how far he want to go. There all could be decided with the help of one’s own study habits, throughout the life [Stella and Purushothaman, 1993]. “Study habits in this study has been taken as the total scores secured by the students on various dimensions of SHI (STUDY HABIT INVENTORY) developed by Palsane & Sharma in the year 2003.”

ADOLESCENT CHILDREN- In this study Adolescent Children means the children between the age group of 10 -18 years. Adolescent is a phase of life of a person when he is no more a child and not yet adult. WHO define adolescence as “the phase of life between 10-19 years of age characterized by
physical growth, emotional psycho social and behavioral changes, thus bringing about transformation from childhood to adulthood.

**REVIEW OF RELATED LITERATURE**

Almost every research study starts with a review of literature. Reviewing the literature has become the most pivotal part of the study for any research. It has become a very crucial tool for getting the right way for doing proper research. The literature is reviewed to gain idea into how much research work has been done in a particular area. Through this, it is known that in which area research work has been done more and with which variables to work? Review of related literature provides the directions for the research, along with this it helps to determine the objectives and hypotheses related to the study. By only review of related literature we can get an idea about the hypotheses will be null or directional. Review of literature is a contemplate related to books, past researches, scholarly articles, and any problems that include practical and theoretical work. This gives important insights to the researcher . It is very concerning that there is no or almost zero research about digital wellbeing , where as India is now the most populated country in the world , where the maximum youth is in our country . In this digital era where there is almost zero research in field of digital awareness is very concerning , the researcher wants to develop a model that helps the adolescent children in managing time with digital technology and this would only be possible by reviewing how much research has been done before The researches in the concerned field have been classified under the following four sections for the sake of convenience and to have clear picture of research

**JUSTIFICATION OF STUDY**

Digital Diet Model is an intervention programme that present the way how to manage the time with digital technology? As the recent studies revealed- This generation has grown up with a full fledge internet, social media and a constant flow of information, according to Beall (2016) ,40% of Adolescents generation as being addicted to their digital devices including computers and smart phones (Beall,2016). Today the pervasiveness of internet usage by adolescents is well documented (Gross,2004; Pew Research center,2019); however, there is a lack of research showing how the internet is related to adolescents well being and development (Gross,2004). This lack of research is alarming giving the increased push for the development of such model which present the way spending time away from the technology and how adolescence children improve their study habits will also be elaborated by
this model. Although studies have shown that the integration of technology within the classroom has the potential to increase educational productivity by accelerating the rate of learning (U.S. department of education n.d) Simuforas (2013) determined that high levels of engagements in social networking can cause adolescents to lose focus on academics tasks and negatively impact academic success. The major objective of this study is to create such model which helps the adolescents managing time with technology and to improve study habits as well. Now a days children are feeding technology rather than a quality food, in this scenario it is very necessary to invent a model that pave the way of digital detachment so that it will help not only in their studies but also in their overall personality. Digital diet model present the way how to spend the time with digital technology along with all the task which are required for the good and healthy life. The main reason for selecting adolescent children is that they are more likely to be affected by the digital technology in comparison to other age group and also this age group is the base of upcoming life.

![Age wise distribution](image1)

**DEEPFAKES & DIGITAL DIET MODEL**

Deepfakes are synthetic media that is use to manipulate or generate fake visuals and audio contents with the intention of misleading someone. Now a days when maximum internet users are of the age group of 10 to 18 years, it is very concerning that these aspects of AI, misleads the youth and mould them to the wrong direction to overcome this concerns, students should consume the relevant and appropriate data and also reduce the time with digital technologies. Digital diet model balance the screen time and helps the students for the holistic development.

![Social media (Percentage %) distribution](image2)

**CARDIAC DISEASES & DIGITAL DIET MODEL**

In post pandemic era, when the Cardiac diseases increases day by day specially in youth and children. The cases of cardiac arrest increases significantly due to lack of physical activities and lack of proper nutrition. In the present time children spend 6 to 7 hours with the digital devices and avoid physical
activities as well as outdoor games that results in being inactive that lead to fatty material building up in arteries that can cause cardiac arrest. students should give balance time to digital devices as well as physical activities that can lead to develop all the three aspects of development that is cognitive, affective and psychomotor domain.

OBJECTIVES OF THE RESEARCH -
1. To establish the conceptual framework of Digital Diet Model (DDM )
2. To identify the various components of Digital Diet Model (DDM)

HYPOTHESIS -
$H_0$- There will be significant difference in the mean scores of students of experimental group and controlled group

MATERIAL AND METHODS
The present study employed an experimental method with two groups of non randomized pre test post test design to test the effectiveness of digital diet model on the study habits of adolescent students .pre test was administered to both control group and experimental group to find out the homogeneity between the groups. The experimental group was exposed to treatment with self developed digital diet model while the control group was not given any treatment. Experimental design patterns followed in the study and variables included in the study have been depicted in the table-1

<table>
<thead>
<tr>
<th>Table -1 Experimental design of the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-randomly assigned groups</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td><strong>Experimental group</strong></td>
</tr>
<tr>
<td><strong>Control group</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table -2 Variables of the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
</tr>
<tr>
<td>Exposure to digital diet model</td>
</tr>
</tbody>
</table>
SAMPLE
The study sample comprised 50 students of age group 10 to 18 years studying in Dr. Virendra swaroop education center, Kanpur Uttar Pradesh in the academic session 2023-24. The school was selected through a convenient sampling technique. Out of 50 students 12 students were selected and split into two groups that is experimental group and control group.

TOOL
A self made digital diet model was developed to improve student’s study habits by considering the objectives of digital diet model. This model is a 3 week intervention programme having 3 steps. In step-1 students were given digital devices for 2 hours in the whole week after completing step -1 , students were given digital devices for 1 hour in a week and in the third step in the third week no digital devices were exposed to the students, after completing successfully the three steps of digital diet model, it has been seen that the study habits of the students were increased significantly.

Figure -1: Flow chart of Experimental Design
Table -3 - Information about three weeks intervention programme

<table>
<thead>
<tr>
<th>Week</th>
<th>Duration</th>
<th>Time for digital devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>First week</td>
<td>2 hours</td>
<td>After school</td>
</tr>
<tr>
<td>Second week</td>
<td>1 hour</td>
<td>After school</td>
</tr>
<tr>
<td>Third week</td>
<td>No digital devices</td>
<td>No digital devices</td>
</tr>
</tbody>
</table>

Figure – Glimpse of the use of Digital diet model

Mean scores of the Experimental Group and Control Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Phase</th>
<th>Group</th>
<th>N</th>
<th>SD</th>
<th>Mean</th>
<th>t value</th>
<th>df</th>
<th>significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre -testing</td>
<td>Experimental group</td>
<td>6</td>
<td>2.16</td>
<td>24.5</td>
<td>2.48</td>
<td>10</td>
<td>Not significant at .01 level</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td>6</td>
<td>3.60</td>
<td>19.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IJFMR240216773 | Volume 6, Issue 2, March-April 2024
Post-testing group | Experimental Group | Control group  
---|---|---
6 | 1.048 | 6 | 3.60  
| 29.5 | 19.83 |
| 5.79 | 10 | Significant at .01 level |

Table -2 indicate that at the pre-testing phase , the mean and standard deviation scores of the experimental group were 24.5 and 2.16 whereas the mean and standard deviation for the control group were 19.83 and 3.60 and the t value of both the groups were 2.48 at 10 degree of freedom which is not significant at 0.05 level. it means that students in both experimental and control groups have the study habits before the onset of the intervention programme.

Further ,it is also evident from table -2 that post test mean and standard deviation value for the experimental group were 29.5 and 1.048 ,respectively whereas, for the control group ,it was found to be 19.83 and 3.60 for a two tailed test, at 1% significance level, the critical table value of ‘t’ with the degree of freedom 10 is 1.372 and the computed value of ‘t’ is 5.79 ,hence it is greater than the critical ‘t’ value of 1.372. therefore ,it is to be taken as significant at 0.01 levels. It reveals that the experimental group students ‘s study habits increases significantly after exposing to digital diet model. The graphical representation of the above results is given in figure6.

### Conclusion

The present study justified that digital diet model increases the study habits of adolescent students . Besides research findings, it was also observed by the researchers that digital dieting is crucial now a days due to the technology era .students were showing keen interest and curiosity towards digital diet
model and were more focused on book reading. Furthermore the health issue was also resolved because students were time for physical activities. therefore it is suggested that digital diet model helps to enhance the habits of book reading and also the habits of exploring the world rather than digital world that also develop divergent thinking among learners.

EDUCATIONAL IMPLICATIONS / RECOMMENDATIONS
The outcomes of this research may be helpful for researchers, students and teachers, and policy planners. Digital diet model is an exciting and innovative way of enhancing study habits as well as the concentration, and for the good mental health.